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COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

THE DAILY BULLETIN of the Manufacturers' Record is published every business day in the year for the purpose of aiding manufacturers and business men generally who need to keep in daily touch with the new industrial, railroad and financial developments of the South and Southwest. Supplementing and in connection with the work of the Manufacturers' Record, it is an invaluable aid to all who are seeking business in the South and Southwest, the most wonderfully endowed section of America, where industrial, railroad and financial activity is creating an ever-widening market for machinery of all kinds, railroad equipment and building supplies, and for financial operations, etc., and where the knowledge and skill of the engineer and expert will find their largest field of operation.

The Daily Bulletin is intended simply to cover every day the work of the "Construction Department" of the Manufacturers' Record in reporting every new mining, manufacturing, railroad and financial enterprise organized in the South and Southwest, and it is not intended to be a general daily newspaper. To all who want to be advised every day of every new enterprise organized in that section it is invaluable.

THE APPALACHIAN FOREST RESERVE.

The present Congress will be called upon to consider the long-standing project of the Appalachian National Forest Reserve. The measure before Congress contemplates an appropriation of \$5,000,000 for the purpose of creating such a reserve in the Southern Appalachian mountains. It is favored by many officials of the government, including the President, Secretary Wilson of the Department of Agriculture, by many organizations, including a national body, of which Mr. R. B. Hayes is president, and by thousands of persons who recognize the advantages to the whole country of such an undertaking. Successfully carried out, it means the preserva-

tion for all time of a great expanse of timber country containing probably the most representative collection of trees in the country and occupying a strategic point of immense and far-reaching importance to industry and commerce. Such a tract under government care—and because of its location and its wide influence it can be cared for in the right way only under federal auspices—would in itself be potent in emphasizing the necessity for proper, economic handling of the forests still remaining in the country, and do much for the cultivation of a public and private opinion much needed if this country is not to face in a comparatively short while an embarrassing timber problem. But that is not really the main point. In the area embraced in the proposed reserve are the headwaters of some of the most important streams in the United States flowing both toward the Atlantic and toward the Mississippi. Upon the maintenance of these headsprings depend largely the maintenance of navigation of great rivers and the development of industries, especially in this era of water-generated electricity for manufacturing power. These interests appeal to a constituency confined to no part of the country—a constituency which ought to be able to induce final and favorable action at this session of Congress upon the plan for the Appalachian Reserve.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 56 and 57.

THE PANAMA ISSUE.

Mr. E. C. Camp of Knoxville, Tenn., president of the Coal Creek Coal Co., writes as follows with reference to the attitude of the Manufacturers' Record toward the Panama-canal issue:

The issue concerning the wisdom of President Roosevelt's action in the Panama-canal matter is, as we think, in view of the utterances of commercial and other bodies all over the South nearly, rather inopportune, since the greater benefit to the South, whose interests you have always so ably championed, will come from the construction of the canal, and it is best that nothing shall occur to even delay the speedy completion.

The Manufacturers' Record has raised no issue as to the wisdom of Mr. Roosevelt's course in the Panama-canal matter, except as wisdom should be bulwarked upon morality, public and private. Its contention has been that in the Panama matter, as in all matters of national or international moment, the course for the government of the United States is marked out by the Constitution and the laws. It holds that criticism of a deviation from that course by any branch of the government is never inopportune, however it may fail to harmonize with the views of commercial bodies of the South or anywhere else. Our correspondent has doubtless observed that the attempt to stampede such bodies, we believe at the initiative of representatives of the government at certain ports, was hardly a success. Certain it is that we have dis-

covered no profound unanimity of opinion in favor of the administration's hasty program among the representative commercial bodies of the South based upon full knowledge of the situation.

The Manufacturers' Record has too long labored in behalf of an isthmian canal, even at times when other agencies were passive, to view with anything but regret the possibility of delay in the speedy completion of the canal.

It regards the acts of the administration as most potent to cause such a delay, to the disadvantage of Southern commercial interests. That, however, is a matter of secondary importance. The overshadowing issue, involving, it is true, the prosperity of the South and the rest of the country, is the observance of the laws of the United States. It is but a step from holding them in slight esteem in our foreign relations to disregarding them in home affairs.

THE DANGER OF THE PRESENT COTTON SITUATION.

As recently pointed out in the Manufacturers' Record, the production of grain in the South last year was 773,000,000 bushels, against 607,000,000 bushels in 1902, a gain of 166,000,000 bushels. Of this increase, 138,000,000 bushels was corn. The increase in the value of the three cereals, corn, wheat and oats, in 1903 was nearly \$95,000,000 over the preceding year. It is important to emphasize these facts just at present in view of the danger that the high price of cotton will so concentrate the attention of the farmers upon cotton-growing as to cause them to give less attention to the importance of providing their food-stuffs first and making cotton their surplus or money crop. The present price of cotton would in the long run prove a great injury, rather than a blessing, to the farmers if it should result in their giving less attention to the diversified agricultural development which for several years has been one of the most striking signs of the material upbuilding of the South.

Last year the South had about 28,000,000 acres in cotton, an ample area under ordinary conditions for the present. Had the weather been propitious and the yield per acre equal to the average of the two preceding years, the crop would have been about 11,000,000 bales; had the yield per acre been equal to the average for the three years from 1898-99 to 1900-1901 the crop would have been about 12,500,000 bales, and had it been equal to the average of the three years from 1895-96 to 1897-98 it would have been 13,000,000 bales. The shortage in last year's crop was due not to lack of acreage, but to the remarkable weather conditions, beginning in the spring, when continued cold, wet weather delayed planting throughout the South for over a month. With 28,000,000 acres in cotton this year it is possible, with good weather conditions, to produce certainly as high as 12,000,000 to 12,500,000 bales, though there may be some question whether that amount of cotton can be picked with the present labor supply. We believe that the shortage of cotton throughout the world and the increased consumption make it exceedingly desirable from every point of view that the coming crop should be 11,500,000 to 12,000,000 bales, and that even at that figure it should command somewhere in the neighborhood of ten cents a pound, if not more; but if the season should open with a large increase in acreage, without regard to whether it can be properly cultivated and fully picked, there might be such a combination of forces as to beat prices down below a fair level.

The Manufacturers' Record trusts that the South may never again have to face such low prices for cotton as those which prevailed during the period of extreme depression from 1891 to 1898. We believe that we have entered upon a period to run for several years of a much higher range of prices, but to make sure of this it is essentially important that the South should raise its own food-stuffs; that instead of lessening its attention to diversified agriculture, it should give still greater attention to corn and wheat and oats and other food-stuffs, and that then, and then only, should it make a gradual increase in cotton acreage sufficient to meet from year to year the rapidly-increasing consumptive wants of the world.

Every man interested in the South's prosperity, its bankers, its merchants, its manufacturers and its leading farmers, should press the importance of this subject upon the attention of the entire agricultural community. Instead of being carried away by the speculation which is now sweeping over the cotton world, exceeding conservatism is demanded throughout the South. When prices reach the present level, the bulls and the bears may well be left to fight out the question as to whether prices will go higher or lower. They may go higher, but they may go much lower, and if they ever commence to drop it will likely be very rapid. The people at large cannot afford to become involved in a speculative craze. No greater misfortune could befall this section than a wild speculation in cotton, with the inevitable collapse which would certainly follow sooner or later. The injury would not simply be the financial losses which might come to many thousands, but such a speculative craze, whether profitable or unprofitable, would disorganize business and make for a lack of stability, turning the attention of everyone to "get-rich-quick" means rather than to the legitimate business interests of the country. The Manufacturers' Record does not undertake to say whether cotton will go higher, as the bull leaders claim, and claim, we believe, with thorough sincerity, nor does it undertake to venture a prediction as to whether prices will go much lower before the

new crop, but it would remind its readers that history repeats itself. Two or three years ago, during the wild speculation in New York, there seemed to be no limit to the demand and to the advance in prices of stocks and bonds. Over and over again the statement was made that the country had grown so rich that the supply of securities was inadequate to the demand, but there came a time when it was found that the supply of securities was in excess of what the public wanted, and then came the great crash, with the wiping out of thousands of millions of paper profits and the destruction of many reputations, which ought to have taught a lesson to the whole country. Even in the iron market it was less than a year ago when furnaces were crowded to their utmost capacity, and we were making at the rate of 18,000,000 tons of iron and importing at the rate of 1,000,000 tons a year. There seemed to be no limit to the consumptive demand of the country. Pig-iron was selling in Birmingham at \$18 to \$20 a ton, and in some cases \$22 to \$23 a ton, and buyers were scrambling for it. It is selling today at about \$9.50 to \$10 a ton, and though production throughout the country has been cut down almost 40 per cent., the supply still seems equal to the present consumptive requirements.

Every boom in stocks, in iron, in real estate, which has ever swept over the country has been followed by the natural swing of the pendulum to depression and lower prices. The history of every boom should prove a warning to the South to beware of a wild speculative boom in cotton. It is much better to have lost the chance of possible profits in cotton speculation and to have attended to legitimate business than to have run the risk of being swamped with debts by losses in cotton or any other speculative operation. Upon the bankers of the South will rest a great responsibility as to whether they encourage or discourage the present speculative operations, not only of cotton people who are familiar with the ups and downs of the trade, but of the general public, which, according to reports, is being drawn into this maelstrom of speculation.

ELECTRIC RAILWAYS TO CARRY FREIGHT.

The use of electric railways for certain classes of freight service is extending rapidly in sections where inter-urban lines have been built. The adaptability of such roads to the transportation of the lighter classes of freight is being cultivated, with the results of convenience to the public and profit to the companies. These lines have shown themselves able to carry at less cost much freight that was formerly conveyed to and from sections in wagons, and they thus perform a service which, in many instances, could not be done by steam roads because of the grades to be traversed. In the vicinity of some cities and towns the utilization of electric railways for this work has resulted in the abolishment of wagon express lines, so far as long hauls are concerned, the service of those vehicles being reduced to the circumscribed limits of towns and villages, the railway doing the hauling between the different communities. Just how far this use of electric railways for freight service will extend is not yet apparent, but it appears probable that they will handle in a smaller way nearly all the various kinds of freight that are conveyed on steam railroads. With a few exceptions, their service will not be in competition with the steam lines, but supplementary thereto, and already some of the railroad systems are securing control of trolley lines tributary to their systems in order to insure their services as feeders.

Originally designed for the transportation of passengers, electric railways have rapidly demonstrated their capabilities to perform the general functions of transportation lines. They have, moreover, extended the benefits of railway service to districts which steam roads would probably never have penetrated, or if extensions ever were built to them, such construction would only have been undertaken after population has increased to such an extent as to practically compel the establishment of railroad service. But the cheaper construction of trolley lines, permissible because of the ability of electric cars to easily traverse grades which are insurmountable to steam locomotives, has permitted the construction of this newer type of line, affording certain sections of the country the opportunity to develop more rapidly, as well as giving to the present residents

thereof facilities which they would have otherwise been obliged to have waited years to obtain.

Experience appears to show us that electric railways are a natural development in the older portions of our country, but it has also been demonstrated that they are likewise profitable and advantageous in newer regions where a large population has been soon established owing to rich natural advantages. Several electric-railway projects in Texas and other parts of the Southwest demonstrate that the value of the trolley in its natural field of use is understood and appreciated. The Fort Worth & Dallas Electric Railway, to which reference has been frequently made, is a notable success, and construction has already begun on a line to connect Guthrie and Oklahoma City. Down at Beaumont, Texas, a line has been built to Sour Lake—twenty miles—and it is also proposed to extend it to the Saratoga oil field, and, furthermore, to Port Arthur. The Houston, Liberty & Batson Electric Railway is a new proposed line, plans for which are being pushed by the man who promoted the Beaumont & Sour Lake road. Others have on hand a project to build a railway connecting Houston and Galveston, and it will probably be fulfilled. In the mineral region of Arkansas and Missouri there are several electric-railway plans in process of formation, and in the latter State a company known as the Missouri Central also proposes to build an electric railway nearly 200 miles long, reaching from Brookfield via Glasgow and other points to St. Louis.

These lines are but a few of many electric-railway projects in the Southwest, and they all propose to carry freight as well as passengers. Those lines in the mineral regions will doubtless do a considerable freight business, as they are primarily designed for such service, and the others are planned as much for freight as for passengers. According to their projectors, the lines surveyed are, for the most part, through regions which could not, except at prohibitive cost, be penetrated by steam railroads, so that these electric railways will convey the benefits of transportation to sections and people who might never have secured them but for the development and protection of trolley lines. Thus the use of electric railways as freight carriers appears destined to increase in all prosperous re-

gions, they finding in many instances their own new fields of work and in others taking the place of the old-fashioned stage lines for the conveyance of freight and passengers to steam railroads.

AN EDUCATIONAL SNARE TO BE AVOIDED.

Apologists for the Southern Education Scheme do protest too much. An example was given in the New York Times' comments upon the little spur given to the revived movement for federal aid in negro education in the South by Chancellor Hill of the University of Georgia and others at Mr. Robert C. Ogden's dinner to the Southern Education Board. The Times notes that Chancellor Hill argued with much force that the aid to Southern education should be accorded from the national treasury, and it added:

That is a policy which the Southern Education Board has not considered. The labors of the Board have been confined entirely to instructing and arousing public opinion South and North as to the fact and the need of dealing with them.

It is feared that the Times seeks to draw an impossible distinction between the Board as a body and what President Roosevelt in a dilemma would probably call the "Inchoate" Southern Education Board—that is, its individual members in their writings and talkings based upon what the Times, in lack of knowledge, is pleased to call the "facts" which the Board has imposed upon a suffering public. If it studies the records of this five-year-old movement and the utterances, hardly necessary to be reproduced here, of leading members of the Board boldly or bunglingly offering the links between the menacing Blair bills of twenty years ago and the most recent foray; if it studies the literature circulated by the Board and calculated to enlist a small army of teachers in any movement promising them more pay, it will incline to take another view about the alleged passive attitude of the Board toward a revival of the Blair scheme. Be that as it may, two or three matters must be considered. At the height of the Blair-bill frenzy the management of the New York Evening Post, not then swayed editorially in behalf of negro suffrage in the South by a grandson of William Lloyd Garrison, took the firm and lofty ground:

The South can much better afford to have fewer intelligent voters ten years hence than to have purchased their education at the expense of its own self-reliance and self-respect.

And the attitude of Chancellor Hill of the University of Georgia, changed, it is stated, from that taken by him fifteen or twenty years ago, may perhaps be indirectly traced, as an unconscious adaptation, to a situation in the Georgia senate in the early eighties described by Woodrow Wilson, now president of Princeton University. He witnessed a majority in that body turn down a proposition for higher taxation for school purposes and favor one that the representatives of Georgia at Washington should do all in their power for the passage of the bill giving national aid to education, and he wrote:

It was evident that no increase in the State appropriation for public education would be voted so long as there was the least prospect of aid from Washington. The whole performance impressed me as a startling declaration upon the part of a well-to-do community of its deliberate determination to enjoy the easy position of a beneficiary of the national government to the fullest possible extent rather than to be independent and support a good school system by its own unaided effort.

This federal aid for negro education

in the South has, 'tis true, not been put forward prominently by the Southern Education Board as a board, and the reason may probably be discovered in the fact that in 1900 at the third Conference for Education in the South a resolution looking to that end was suppressed at the instigation of Hon. William L. Wilson, who undoubtedly recognized its potentiality for evil. That is plainly manifest in the argument recently advanced by Mr. Charles A. Gardiner of New York, who, if we mistake not, was concerned with the old Blair bill for the promotion of mendicancy, as it was called; for his plan of national aid, evidently inspired by the "facts" circulated by the Southern Education Board, concluded with the endowment of the National Bureau of Education with supervisory powers, "so that it can make education compulsory, fix the courses of study, and direct instruction into any channel—industrial, intellectual, moral or religious—that the citizenship of any locality may particularly require."

That is a fine prospect for any self-respecting American community, whether illiterate or literate.

But it is exactly the prospect with which the General Education Board, that "clearing-house of philanthropy," the Southern Education Board, that "bureau of the propaganda," and the allied body, the Conference for Education in the South, would familiarize the public mind.

A PUBLISHER'S MISTAKE.

Why have the publishers of Miss Ellen Glasgow's works made the mistake of circulating such stuff as the following:

Miss Ellen Glasgow, the author of "The Deliverance," the notable novel of the year, has three sisters who are devotedly interested in her work. This interest reached a climax during the writing of "The Deliverance." Miss Glasgow had given her sisters an outline of the story, and it appealed to them strongly. When she writes she locks herself in her den, a small room in the Glasgow home at Richmond, Va. After she had finished a chapter she allowed her sisters to read it. As the story developed, they became absorbed. They could scarcely wait from day to day to learn the progress of the novel. As the story grew they camped outside Miss Glasgow's room, and when she came out after a hard morning's work there was a wild scramble for the freshly-written sheets.

In Miss Glasgow the South made a notable gift to the school of writers of American fiction. She sounded and has maintained to a wonderful degree a clear, fresh note, and has given in all her writings from "The Descendant" to "The Deliverance" immeasurable relief from the atrophizing efforts of intelligence to discover a germ of originality in the past ten years' succession of swashbucklerism, colonialism, historical romancing and superficial sociology poured forth by the ton from half a dozen publishing houses. The things were sold by the hundreds of thousands. They were sold not upon their merits, but through the application to literature, falsely so-called, of methods which have given an international reputation to Sunny Jim, have induced millions of people to use various brands of soap which they could not appreciate and millions of others to imagine that they have been sustained by eating for breakfast various clever disguises of sawdust, cork or corn-pith. For the purpose of marketing worthless rubbish, bound in covers more or less lurid, nauseating details of the doings and the personal traits of the producers of the rubbish have been printed far and wide. Deep interest in the products, resulting in the incontinent expenditure of hun-

dreds of thousands of \$1.25s net, has been created by deft allusions to the toilet of this writer, by discussions of the matrimonial intentions or performances of that, by comments upon the table manners of one and by quotations of the profound absurdities of another. Notoriety for book-producers has run neck-a-neck with notoriety of social arbiters, with their monkey luncheons and their swine dances. Above all this mediocrity in writing and lack of gentility sedulously cultivated by publishers Miss Glasgow has stood in refreshing contrast. She has not needed the personal pointer. She has written books that have been read because of their intrinsic value, and which will still be sold long after the horde of publisher-puffed pigmies have been forgotten. Her latest work emphasizes her assured position as a creator of enduring literature. It needs no advertisement save the announcement of the fact that she has written it. Her friends ought, therefore, to protest against the attempt to employ personal gossip in exploitation of it.

MAKING GOOD ROADS.

Hays county, Texas, has begun systematically to provide itself with macadamized roads. Between \$6000 and \$7000 have been invested in machinery, tools, teams, etc., for the work, and a bond issue amounting to \$25,000 has been floated to provide funds for this beginning of road improvements. Hays county is the southern-central part of Texas, San Marcos, the county-seat, being on two trunk lines of railroad. Nevertheless, it is not one of the older counties of Texas, and is not far from the border. This spirit of progress in a region of comparatively recent development should be an encouragement to many older sections of this country where the question of good roads has not progressed to the point of construction, even if the subject has been considered at all.

THE SOUTHERN FARM MAGAZINE.

February is the least important month in the year to farmers in many sections of the South. It is the period neither of seed time nor of harvest. It neither winds up the old year nor makes preparations for the new. It is the shortest month of the year, and less farm work is possible. Therefore Col. J. B. Killebrew chooses this month's allotment in the Southern Farm Magazine of his practical and interesting talks with farmers as the medium for some excellent advice to young men in the country as to the manner of improving their spare time in reading. Incidentally he expatiates upon the attractions and advantages of life in the country, things which are too often forgotten nowadays in the almost stampeding rush from the farm to the city office. He also contributes a suggestive article on farm fencing. Other features of this issue of the Magazine are "After Ten Years in the South," by L. Burns, Jr., of Mississippi, an enthusiastic exposition of the successful experience of an Illinois man in the lower Mississippi valley; "Increase in Southern Crop Values" between 1902 and 1903; "Southern Whites in Cotton Production," by President J. C. Hardy of the Mississippi Agricultural and Mechanical College, a revelation for those persons who have an exaggerated notion about the importance of the negro in Southern agriculture; "How a Railroad Has Made Friends With the People," by Thomas P. Grasty, setting forth clearly the joint interests of corporations and the people, and "Scientific Potato Cultivation," by Consul-General Frank H. Mason

of Berlin, describing the methods and the results of potato growing in Germany.

Editorially are analyzed somewhat notable discrepancies in the statistics of tobacco values as published at different periods by the National Department of Agriculture, and in the other departments are topics appealing to the home circle, to the general farmer and to all persons interested in immigration to the South and in its general development.

The Southern Farm Magazine is published monthly by the Manufacturers' Record Publishing Co., Baltimore, Md. Price \$1 a year.

RETURNING TO STANDARDS.

Joel Chandler Harris has resumed active editorial work for the Atlanta Constitution. The return of Uncle Remus to the tripod has apparently brought the Constitution back to the fields from which it has wandered during the Panama episode, for in its issue of January 21 it prints a double-column editorial sharply contesting the fundamental idea in the latest Panama move. Protesting against the linking of the words civilization and progress, it says:

"The magazines and the newspapers have a habit of talking about our civilization and progress in a way that is confusing to say the least. Not only is the talk confusing, but it fills the minds of the people with only the very vaguest ideas as to what civilization and progress consists in. * * * They believe that civilization is inseparable from progress. Whatever promotes the growth of trade and commerce and whatever adds to the wealth of the individual and community, whatever contributes to the greatest convenience and comfort of the people at large is called progress, and progress and civilization—in the popular mind—must necessarily go hand in hand together.

"There was a time, and not so very long ago, when the popular phrase was civilization and enlightenment. The terms were interchangeable—civilization meant enlightenment and enlightenment meant civilization. But they have parted company. They have been divorced by the materialists, and civilization has been wedded to what is called progress. But it is an unhealthy and an illegal union, and no real good can come of it.

"Divorce civilization from morals, and you have nothing left but a ridiculous and impudent sham."

Not long ago the argument seemed to be that morality had nothing to do with the isthmian brand of civilization and progress.

GOVERNMENT GRAIN INSPECTION.

More trouble for the farmers of the country as well as for all other persons interested in the grain trade seems promised in a bill introduced into the Senate by Mr. McCumber of North Dakota, providing for government inspection of grain. The bill places under the authority and direction of the Department of Agriculture a force of government-paid inspectors, and the opposition to it, in which the Chamber of Commerce of Baltimore is leading, is based upon the belief that a change from the present methods can result only in injury to the great grain trade of the country, and will be likely to give advantage to foreign great grain-producing countries. It would be difficult to imagine what argument except that of the most superficial kind could be advanced in support of such a measure. The country has already experienced the possibilities for ill in the direct interference of government bureaus, especially those connected with the Agricultural Department, in the details

of crop production and crop movements, and this measure, which it seems would give the Secretary of Agriculture the power to prescribe a classification and grading schedule for grain, rather caps the climax.

CHANCE FOR IRON FURNACES.

Mr. Jewett Allen, president of the Chattanooga Trust Co., Chattanooga, Tenn., in a letter to the Manufacturers' Record says:

"We are working to develop the Walden's Ridge coal field, where we control some 30,000 acres of coal and timber land. We are prepared to offer special inducements to one or more iron furnaces, besides having one of the best coal propositions in the South."

BELVEDERE AND BALTIMORE.

Significance of the Great Hotel for the City and the South.

The spirit of enterprise and of civic pride expressed in the building of the magnificent hotel, the Belvedere, means more for this city than any event in the last ten years. The change from horse cars to electric, which marked a great era in our progress; the beginning of the suburban development ten years ago, the construction of our modern office buildings, the advance in financial operations, all combined, are not so strong an announcement to the world of our enterprise nor calculated to have a more far-reaching effect upon the city than this great structure. Here is the visible evidence that Baltimore has the men who can initiate such an undertaking and the courage to carry it through. The Belvedere is—

A measure of Baltimore's growth.

An embodiment of Baltimore's spirit.

A guarantee of Baltimore's progress.

In the stateliness of its proportions, the beauty of its lines, the completeness of its up-to-date furnishings and service and the excellence of its cuisine the Belvedere combines the best of the past and of the present, and in itself is an index of the future. It is a mark of distinct development.

The Baltimore of today is as different from the Baltimore of ten or fifteen years ago as is the Belvedere from Barmum's. The passing of that well-known hostelry was one of the preliminary steps of advance in building operations in this city which has given us our cluster of magnificent office buildings. Unlike the organization of a financial institution or of a great industrial enterprise, which appeal purely to the material side of life, such a hotel as this, while meaning far more to the city than any financial or industrial enterprise of equal investment, appeals also to the social and aesthetic side of life. In this day of palatial homes and hotels, of vast fortunes rapidly increasing in number and amount, no place, however great its charms or advantages, can attract the class of tourists and capitalists whose visits are such important factors in the upbuilding of any community.

In attempting to measure the need of such a hotel as this and the field of its operations we can to some extent judge the future by the past. Within the past ten years we have begun the modernization of Baltimore. We have built our splendid office buildings, our electric-railway system and commenced our suburban development. In that period the increase in population in Baltimore and its immediate suburban district has been about 100,000, and in 1900 there were less than fifty cities in the United States having a total population equal to or greater than this actual increase in our population. During the coming ten years our rate of increase, in keeping with that of the in-

crease of the country at large, will be between 100,000 and 150,000 people, or, in other words, we shall add to our population within that period a city greater than Atlanta. Within ten years we have increased the capital and surplus of our banks and trust companies from \$24,800,000 to \$59,000,000, the deposits from \$31,800,000 to \$68,700,000; we have increased the deposits of our savings banks from \$41,800,000 to \$70,000,000; we have increased the number of telephones, which aptly signify the spirit of the day in time-saving appliances, from 2500 to over 20,000. But all that we have done is but a start to what we shall see in the future.

A fitting climax to this period and the starting point for greater attainments is the building of the Belvedere by Baltimore capital. It is such a hotel that the capitalist and investor has a right to expect to find in a progressive community of this size. We have only to think of the superb hotel equipment of such cities as Boston, New York, Chicago, St. Louis and New Orleans to understand how much the character of the hotel reflects the character of a business community and what influence it may be towards the building up of a community. We all remember how the construction of the Waldorf was regarded by many people, who thought it was a foolish venture doomed to be a financial failure, but we know now of its phenomenal success, with its yearly profit generally reported at over \$1,000,000. We cannot overlook the effect upon the material development of Florida of the chain of palatial hotels built by Mr. Flagler, stimulated thereto by the unexpected financial success of the Ponce de Leon. With the building of the St. Charles Hotel a few years ago New Orleans entered upon a new period of its history. Since then, and largely by reason of the St. Charles and its ample accommodations, New Orleans has become the great convention city of America, and today is probably the best advertised city in the United States. What the Waldorf has been to New York as a meeting place for men all over the world the St. Charles has been to the South and Southwest. Its influence, through the great conventions almost continuously in session there and the wide attention it has attracted to New Orleans upon the material advancement of the city and State, has been incalculably great.

What is happening at New Orleans can be duplicated at Baltimore and carried out upon a larger scale. This hotel offers the opportunity. It will make Baltimore more than ever a favorite stopping place for travelers of wealth, quick to see its opportunities for increasing that wealth. The men who stop here, either as mere recreation seekers or as members of organizations of bankers, manufacturers and others in convention, certain to be attracted to the city by the existence of this hotel, may be expected to return for more careful and extended investigation of Baltimore as a field for investment. It is for all Baltimoreans, therefore, to regard the Belvedere as belonging to them in a certain sense, and to watch with deep personal interest the work which it will do for the city.

The coming of the Gould system to Baltimore, as vitally important as it is destined to be, is, perhaps, scarcely more important to the welfare of this city than the building of this hotel. The coming of that system means that the outside world recognizes the commanding situation, the strategic value of our location. The building of this hotel means that our own people are awake to the same great facts, and home enterprise fully aroused counts for more than enterprise which comes from elsewhere. A hotel such as

the Belvedere is not for today only, but for generations to come. It is a beacon light set on a hill to draw the attention of the traveling world to the advantages and opportunities presented here. Its importance must be judged not simply by the Baltimore of today, but by the Baltimore of five or ten or twenty years hence, by the Baltimore which is preparing to accomplish far more in the coming ten years than it has in the last ten. The growth of the next ten years must exceed that of the last ten to as great an extent as that exceeded the progress of the preceding ten.

We are shortly to begin the complete modernization of Baltimore by the expenditure of millions of dollars for street improvement and a sewerage system. The \$100,000,000 expended in the last few years in the complete reconstruction and rebuilding of the Baltimore & Ohio Railroad is now beginning to bear fruit in a vastly increased traffic. The sale of the Western Maryland, the rebuilding of the line and its connection with the Gould system makes this the Atlantic coast outlet for a new system which covers in the aggregate 14,000 or 15,000 miles. The Pennsylvania, with the many millions which it is expending in the practical duplication of the whole system, is adding very largely to its facilities for handling traffic at this port. The railroad situation was never before so strong, and even if there were no active competition between these roads in bringing traffic to Baltimore, the vast development of the territory drained by them seeking an outlet to the sea would inevitably crowd their lines with every ton of freight that they can handle. The immensity of the natural resources of the back country tributary to Baltimore and the vastness of the traffic which is already beginning to come out of that territory is almost beyond comprehension. West Virginia, of which Baltimore is the natural outlet and for which it is the natural trading center, has many times as much coal as has Great Britain. Its coal area is 16,000 square miles, against Great Britain's 8,000, but in the number and thickness of veins it has not only double the quantity, but many times the total of Great Britain. The foundation of the wealth and power in finance, in commerce and in manufacturing of Great Britain is its coal, of which it now mines about 300,000,000 tons a year. West Virginia can produce more coal than Great Britain, and in doing so create in connection with its general development a wealth beyond calculation. It has been estimated that the territory which stretches from Wheeling to Birmingham has forty times the available coal which Great Britain ever had before it mined a single ton.

Baltimore has naturally looked to the South as a field of its greatest endeavor. By virtue of its geographical position and of trade interests the city is the point for the concentration of the rapidly expanding trade and wealth of that section. What Boston is to New England, what Chicago is to the West and St. Louis to the Southwest Baltimore must pre-eminently be to the South.

The long struggle for preservation from overwhelming ruin following the war and the fight to develop its industrial interests in competition with the entrenched interests of the North has finally been won. Today the world recognizes the South as the coming country, the land of greater opportunities, greater resources and greater growth in wealth than any other region on earth. Before it had succeeded in getting its industrial interests well under way it had to face in agriculture the same disastrously low prices which ten or fifteen years ago nearly

bankrupted the West, when in many places it was more profitable to burn corn as fuel than to ship it to the East. For a hundred years the average price of cotton, the South's great staple, has been over ten cents a pound. Twice since 1800 there have been brief periods of low prices, one between 1842-47 and the other between 1891-99. In the latter period, with cotton selling at from five to seven cents a pound, it is doubtful if the agricultural interests of the South as a whole made any profit whatever. It was a case of bare existence, in which debts were accumulated as in the farm-mortgage days of the Far West. But with the return two or three years ago to normal prices of cotton, gradually increasing this year to what are generally regarded as exceptionally high figures, but which are not higher even now than for a very large part of the last 100 years, the Southern farmer is coming into his own. He has been paying off his debts in the last year or two; he is now accumulating money, and in the last five years (and most of it in the last two years) he has secured for his cotton crop \$800,000,000 in excess of what he secured for crops of equal size for the preceding five years. The crop of 1898, the largest ever produced, yielded to the farmer about \$325,000,000; the crop of 1903 will bring \$650,000,000, a difference in favor of the South of over \$300,000,000. What the Southern farmer has been doing is illustrated in the fact that the total value of Southern agricultural products in 1903 was \$1,600,000,000, against \$660,000,000 in 1880 and \$1,270,000,000 in 1900. In the twenty-three years from 1880 to 1903 the Southern farmer has advanced his productions by 250 per cent., and the Southern manufacturer has advanced his output from \$457,000,000 to \$1,750,000,000, or nearly 400 per cent. In 1880 the total value of the South's agricultural and manufactured products was \$1,100,000,000; last year it was \$3,300,000,000, having trebled in that time, while the population increased only 50 per cent. The tremendous gain in the production of agriculture and manufacture per capita is strikingly illustrated in this statement. The period of low-price cotton from 1891-99 brought about depression throughout the South, saved from great disaster alone by the growth in industrial activity.

With agricultural prosperity there is a growth in industrial development scarcely realized by those not in close touch with it. The production of bituminous coal in the South is now 50 per cent. greater than the total output of the United States in 1880, being 60,000,000 tons in the South last year, against 42,000,000 tons in the United States in 1880. The output of pig-iron in the South—the last of the great industries to be put upon a solid and substantial basis for development—is now about equal to the output of pig-iron in the whole country in 1880. Shortly before his death Mr. Abram S. Hewitt, one of the ablest ironmasters which this country ever produced, said that with the progress which had now been made in the development of the iron and basic-steel industry of the South, referring then especially to Alabama, that State would in the next twenty-five years become the basic-steel center of the world.

Added to the development in coal and iron is the active upbuilding of the cotton-mill interests of the South, destined to dominate the cotton-manufacturing business of the world. One-half of the standing timber of the United States is in the South, furnishing the basis for a woodworking industry greater than that of the United States at present.

And yet, great as this progress has been, it has scarcely commenced. Illimitable as

are the resources of the territory which stretches from Maryland and West Virginia to the Far South, Pennsylvania alone, smaller by 6000 square miles than Alabama, with less coal and less iron and less timber than Alabama, and with still less coal than West Virginia, has \$400,000,000 more of capital invested in manufacturing than the fourteen Southern States. Instead of being discouraging, this fact inspires the South to a realization of the unlimited possibilities for growth in the future. In fact, no limit can be set to the material advancement and to the increase of wealth in the South. This means a field for Baltimore enterprise such as no other city in America possesses. Trade and traffic sufficient to enrich an empire is before us.

With such conditions the Belvedere is more pre-eminently a necessity to Baltimore than ever before. It is an expression of the growing importance in wealth and power of this city, but in addition to that, it will prove to be one of the greatest factors in helping to concentrate in this city the wealth and trade of the empire which surrounds us.

It is no wonder that the owners of the great estate once including the site of this structure, the family whose name will be remembered with pride whenever Maryland valor is mentioned, were pleased to name it Belvedere. There are many hardly entered middle life who can recall the picturesque mansion which once stood a few hundred feet to the east of the site of the hotel, resisting for long the encroachments of stone highways, brick pavements and rows of private dwellings. Some of them who were bold enough to climb the steep embankment left in the leveling of Eager street remember that even above the housetops stretching to the south for a mile or more there was still a beautiful view down the harbor to the bay and across to the green country of Anne Arundel. Since then the high embankment and the old-fashioned mansion with its surrounding foliage have finally given way to the city's needs, but in their place is another Belvedere. Stretches of field and woodland are hard to find, and in some directions the prospect towards the country is cut off by lofty structures of brick, granite and steel. Only the eye of long memory may yet pick out the landmarks so prominent in their comparative isolation twenty and thirty years ago. But one is fronted by stacks of the great steel works at Sparrow's Point, the masses of grain elevators in the lower harbor and the smoke of industry lying along the horizon from Canton to the southeast, around through Woodberry to the north and following the lines of railroad to the works at Curtis Bay. Baltimore has a new beautiful view—a view of activity, of enterprise, of grit, of progress—the most beautiful of all, the superb Belvedere, with its magnificent outlook upon this great city and the surrounding country.

Wants Knitting Machines.

Mr. J. Z. Miller, president of the Belton (Texas) National Bank, desires to get into communication with manufacturers of improved up-to-date hosiery knitting machines. His desire is to find a machine at a moderate price complete in itself which can be profitably operated by persons who cannot leave their homes.

It is reported that Mr. W. J. Jarvis of Cuthbert, Ga., who owns two steamboats, is willing to make them the nucleus of a fleet to operate on the Chattahoochee, Flint and Appalachian rivers, provided the people of Columbus, Ga., will invest in the enterprise.

KENTUCKY OIL FIELDS.

Continued Development Expected During the Coming Year.

[Special Cpr. Manufacturers' Record.]
Barboursville, Ky., January 25.

Work in the oil fields of Southeastern Kentucky is gradually recovering from the recent depression, and this part of the field promises once more to do something in the way of oil production.

The southeastern division has been the seat of a great deal of work during the past two years, and has perhaps been subject to more test work than any other division in Kentucky. Since the shallow formations failed to develop on the scale anticipated, deep drilling has been resorted to in many instances, with good results in some cases and bad results in others.

In the lower division during the past few weeks large contracts for new drilling have been made, and work during the coming few months promises to be carried on on a broad scale. With the impetus given the work of development by the good prices commanded by petroleum and the situation of the market, the operators in the more developed fields have gone outside of the scope of extensive work and penetrated new territory, and the results in most cases are very gratifying.

In Wayne county the Beaver Creek territory has lately been furnishing some very large producers, and drilling in that region will be pushed by those operators who are fortunate enough to have territory on which to drill. Some recent Wayne county completions have furnished an initial daily production of as much as 150 barrels. Of the various divisions of that field, which constitutes a development to itself, the Cooper district is in the lead both in new work and in production. During recent months Eastern capitalists have taken a greater interest in the field, and work is now about equally divided between local and outside operators.

In the Knox-Whitley field there have been three completions during the past week, with a new production of fifty barrels. The Whitley county work will be greatly stimulated by a market for the production, which has just been established. The Standard takes the output through its line from the Louisville & Nashville Railroad to the developments. The wells of this county promise to be more lasting than those of the neighboring county or Knox, as the average depth at which oil is found in the best quantities is 900 feet, whereas in Knox county the producing sand is found at 350 feet. Until recently the wells of the former county have never been fully tested, on account of the improbability of an early market. The price that will be paid for the oil will be the same that is commanded by the Knox county output, which is at present \$1.31 per barrel.

The Standard controls a considerable acreage in the Knox-Whitley field, and has been carrying on some deep drilling in Whitley county. Its first venture has turned out a failure, as it was abandoned. No drilling has ever been carried on in Knox county by the Standard, although a 24-mile pipe line was constructed to the main development and a pumping plant established. The present output of that county is the result of efforts of a number of smaller concerns. Altogether about 100 different companies have drilled for oil in Knox county, but few of them now have a production sufficient to warrant the establishment of pumping plants.

The prospects in the Cumberland county fields are good. One well completed during the latter part of December is good for 100 barrels, and several other big completions are also recorded. This is where

the Standard is doing a great deal of work, and where it has under control the most territory.

Field work in the upper division of the Kentucky field is gradually widening out. In the counties of Bath and Rowan, where the heavy lubricating grade of oil is produced, there have been a number of completions this month, and the runs show up very favorably. Most of the work is being done by local people, although the Standard is greatly interested in drilling on its own account. On account of the shallowness of the oil-producing formations, wells are drilled quickly and inexpensively, and many of the companies have fifteen or twenty producers each. In what is known as the Ragland development, in the Bath-Rowan division, there seems to be a vast pool of oil, and dry holes are a rarity. A great deal of gas has been found recently, both in these two counties and the adjoining fields of Estill county, and a company has been organized to supply the surrounding towns with natural gas. It is not improbable that Lexington will have natural gas.

Considerable wild-cat work is under way in the upper division, and among other counties, Wolfe has been showing up favorably during the past few months. A deep sand has been developed which produces illuminating oil in good quantities, and if this proves as extensive a formation as it is now thought to be, it will be a great stimulant to deep drilling in the other division of the upper field, where now only lubricating oil is produced. The illuminating oil is worth at present \$1.31 per barrel, while the lubricant commands but sixty-six cents per barrel. The latter grade is found at depths ranging from 300 to 400 feet deep, and it has all along been the opinion of operators that deeper down a sand-producing and illuminating grade would be found. A few attempts at deep drilling have been made, but nothing ever resulted.

For a month past there have been about thirty completions in the lower division of Kentucky and about fifteen in the upper division. During the same time no completions are credited to the Tennessee division, but several wells are now nearing the interesting point. The runs for the Kentucky division for a week past approximate 12,000 barrels. More wells are now drilling than there were this time last month, in spite of the fact that there is usually a falling off in interest during the winter months. The center of interest is in the lower fields, but the upper division is receiving a greater share of attention than ever before, and considerable money will be expended during the winter in drilling. To many it appears that work all over the field is rather slow in bringing results, and the Kentucky oil fields will never do much in the oil-producing line, but a glance at what was accomplished last year discourages such a supposition. During that time the field was extended from two or three developments in the southern part of the State, only one with pipe-line facilities, to an area embracing almost the entire eastern part of the State. Many divisions included in this area are still unknown factors, although oil in good quantities has been found in them, but the indications are that with proper development they will show up as favorably as any of the other divisions of the State now producing oil regularly. Through this division during the past year a 250-mile pipe line has been constructed to carry the oil production from the various divisions to the refineries. The price of petroleum has advanced from about seventy cents a barrel to \$1.31 per barrel, with indications of still further advances. Under such conditions there is no reason why during the coming year the field will

not make such rapid strides as it has done during the year past. W. S. HUDSON.

STEADY AT BIRMINGHAM.

Only Moderate Transactions in Iron During the Week.

[Special Cor. Manufacturers' Record.] Birmingham, Ala., January 25.

There were only moderate transactions in iron the past week. But the moderate business concluded did not seem to affect prices. All the sellers were firm, and the trade was a unit in asking on the basis of \$10 for No. 2 foundry. And if there were any sales on a lower basis they were kept very close. There were no charges made against any seller lowering price, and even from the buying markets there were no claims made that competitors were offering at just a shade lower. The market was a very steady one the entire week. There were no large individual orders, but a steady, constant flow all the week of small and medium size orders whose aggregate footed up a respectable business. As has been the case of late, the sales were, as a rule, for prompt and nearby delivery, and the majority of the orders were accompanied with the request to give as prompt shipment as could. This feature of the trade yet shows that this class of buyers are carrying no surplus stocks and are supplying only current needs. There were very few individual orders that footed up to 1000 tons. In volume they ranged from that amount down to 100 tons. Orders from 100 tons up to 500 and 600 tons were most in evidence. In a limited sphere the sales aggregated or approached the current output. But this was not the case with all, as some are so well sold up that their current output is necessary to meet maturing deliveries. Just now attention and effort are directed to shipping on sales already made. There was no disposition manifested to "work" the market, and it was in a measure left to run itself. The sellers contented themselves with taking care of what each considered was his regular trade. The most of the business booked came by mail "in due course," and was entered at current market value. This value, as stated above, was pretty uniform all the week. There was some talk of the lower grades being weak, and of a light demand for them. But the various sales registers to which your correspondent had access did not show this condition, and the lack of a more active demand is fully understood by the trade. With the starting up again of the interests that largely use these grades will come the demand that will rectify the discrimination, if it exists. The iron trade is not without that contingent who are always on the lookout for some feature in it to decry. They generally roost high in the garret or way back in a dark corner of the cellar. There is no middle ground with them where content may exist.

There were no sales reported for delivery during the second quarter. If any were made, they are being withheld. Some buyers were inquirers as to prices, but as far as can be ascertained the inquiries led to no business. So far as sellers' expressed ideas are concerned, they are yet declining to make sales on basis of current values. There seems to be a growing feeling that the selling for forward delivery has been too freely indulged, and that it has not been rewarded with much profit. If the market advances the seller must deliver, and if it declines there is always more or less friction as to delivery and as to standard grades.

A deal has been practically concluded for an important plant for the manufacture of street cars to be erected here. The plant will be known as the Southern Street Car Manufacturing Co. The site is ten acres near Ensley City. W. G. Pil-

kinton of Virginia is the president, and J. W. Gilliam is secretary and treasurer. The company was organized with a capital of \$50,000, which will be increased to \$500,000. A two-story building to be 300x300 feet will be erected for the shops proper without delay, and to this will be added the other necessary buildings as occasion requires. The company signed an agreement to employ not less than 300 men at the start, but the president announces that they will commence with not less than 1000 men, and that the number will be speedily increased to 2000 men. The securing of this plant is a feather in the cap of Ensley, for it will add at least 5000 to her present population. The capital employed by the plant will be furnished by Virginia and New York people. The company owns several valuable patents, and in the words of the president, "we will make high-class cars, and the greater part of our labor will command high wages. We have arranged to draw our skilled men from Ohio and Pennsylvania." To the district this addition to our diversified industries is very important, and to Ensley City it is momentous. It simply insures the future of this already thriving center of industrial activity.

Gossip is now occupied with the erection of a mammoth department store, to be an offshoot of one in Chicago of world-wide reputation. Mention was made of it some time ago. Nothing definite can yet be said about it, but there is no hazard in the prediction that gossip will develop into reality in due course of time. The site has been bought.

The first of the large furnaces being erected at Gadsden by the Alabama Steel & Wire Co. is now in operation, and until its steel mill is completed the product will be for sale in the open market. After that it will all be used in its own plants.

J. M. K.

NO SOUTHERN IRON POOL.

But General Consolidation of Several Interests Is Discussed.

[By wire to the Manufacturers' Record.] New York, January 27.

The executive heads, legal advisers and some of the directors of the Republic Iron & Steel Co., the Sloss-Sheffield Steel & Iron Co. and the Tennessee Coal & Iron Co. have held three conferences since Monday, and have failed to reach any agreement concerning a Southern iron combination. The conferences, which closed temporarily today, resulted in only two tangible conclusions, so far as have been ascertained, these being as follows:

First. There will be no Southern iron pool. The plans heretofore under discussion, which contemplated either a renewal of the former gentlemen's agreement without any adequate or binding penalty for price schedule violations or a general selling agency through which the entire output of the principal producers was to be marketed, were taken up, vigorously picked to pieces and laid aside as impracticable.

Second. Peace and trade stability in the Southern field are expected to come, if at all, through consolidation of the three companies and final transfer of all or not less than a majority interest to the United States Steel Corporation. To promote the consolidation plan, which seems the only logical way of establishing the desired conditions in the South, Capt. Alexis W. Thompson, president of the Republic Iron & Steel Co., was authorized to continue negotiations for some time, and to call the interested parties together when the negotiations have advanced beyond the present preliminary stage. It would appear on the surface that the conferences, which were attended by President Thompson and General Counsel Harry Rubens of

the Republic Iron & Steel Co., President Maben and Attorney John Tillman of the Sloss-Sheffield and Chairman Dou H. Bacon and the legal adviser of the Tennessee Coal & Iron Co., were fruitless, but those best informed do not take this view. A leading interest whose knowledge of the facts should not be second to any analyzes in this way the conferences and the situation:

"The three iron companies mentioned have, by the process of elimination, clarified the situation and practically blazed the way for the final solution, which will come through consolidation. It is not a violation of confidence to say that the inability of the companies to agree upon a revival of the former ineffective price agreement was due to the hostility between Sloss-Sheffield and Tennessee Coal & Iron interests. For valid reasons the companies did not want any new agreement not in writing, and for equally valid reasons the attorneys for the companies could not permit written contracts; that ended the attempt to create a general selling agency with bonds as forfeits, and may be said to have rendered practically certain an ultimate agreement on a general consolidation plan, which will comprise the three companies and finally the United States Steel Corporation.

"To attempt to outline the plan through which consolidation may eventually be accomplished would, in the first place, mean breaking a confidence, and in the second place would arouse antagonism to the extent of positive denials of known facts. It is enough, probably, to state that Captain Thompson is to continue the work he has been doing for some time to bring about consolidation, and that when he issues the call we shall meet again to renew our conferences.

"The Republic Iron & Steel Co. has expressed a willingness to sell its interests in the South and retire from that field, and an offer along these lines is being considered.

"An indefinite offer to purchase a certain interest in the Sloss-Sheffield Company is part of the general scheme for ultimate consolidation, but it is not yet time to say what will be done. Consolidation and a holding company would bring about what we want."

It can be said that the United States Steel Corporation is closely watching developments in the South, and that if at any time the three leading interests there can present to it a definite proposition for the acquirement of financial control, the matter will be taken under consideration. Having been instrumental, in large measure through one of its officials, in starting the general discussion of the plan, it is waiting for the opportune moment before it takes official recognition of the matter.

Improvements at Florence.

[Special Cor. Manufacturers' Record.] Florence, Ala., January 23.

The new Jefferson Hotel, a large and fine structure of stone and brick, the only hotel here, is now in successful operation. Mr. Gus Norton is the manager. The hotel is owned by a stock company of which Mr. R. Lee Glenn is president.

Mr. F. M. Perry is building two brick storerooms for his expanding mercantile business.

Mr. M. J. Dillard is renovating the old Alabama Hotel, a brick and stone building which he bought recently.

Mayor A. E. Walker is deeply interested in the new City Hall, which is now being built upon modern lines.

The track for the electric line connecting Florence, Sheffield and Tusculumbia is about complete, and the power-house at Sheffield is nearly finished.

There are a number of frame houses under construction here, and the city is steadily improving, but more factories are needed. There is a fine opening here for a knitting mill. Dr. C. M. Watson, president of the Florence Business and Industrial League, will be glad to furnish information on that point.

Mr. I. V. Smith, who operates canneries at Delphi and Wabash, Ind., which have a daily output of 320,000 cans of vegetables, has been studying the truck-growing section of Texas with a view to establishing canneries there.

MR. WHEELWRIGHT ELECTED.

Now Vice-President of Consolidation and Fairmont Coal Companies.

Mr. J. H. Wheelwright has been elected vice-president of the Consolidation, the Fairmont and the Somerset coal companies, the Clarksburg Fuel Co. and also of the Cumberland & Pennsylvania Railroad. For some time he has been assistant to the president in these various corporations, and he is himself the president of the Maryland Construction & Contracting Co., the Cassville & Monongahela Railroad Co. and the Canal Towage Co. Mr. Wheelwright is a young man, and has risen rapidly in the business world. He is a native of Westmoreland county, Virginia, and a graduate of the Columbia Law School.

Improvements at Savannah.

Mayor Herman Myers of Savannah, Ga., reviewing the past five years, shows that the total expenditures of the city for public improvements during that period has been \$911,654, of which \$209,444 were for purchases of land for street opening, \$284,217 for paving the streets, \$257,982 for house-drainage system, \$95,747 for paving of sidewalks and \$64,264 for new engine-house, extension of water mains, etc. Nine miles of streets have been paved, but Mayor Myers contends that much additional work of the kind must be done before Savannah may be termed a well-paved city. He believes that vitrified brick is the cheapest and best material for the purpose. He urges in his annual message a continuance of this work and of tree-planting throughout the city, and also prompt action for the erection of a new City Hall to cost \$125,000. Suitable plans have been adopted and bids have been advertised for, which will be submitted to the council at an early date.

To Work for Columbus.

The Progressive Union of Columbus, Miss., has been organized, with Messrs. Walter Weaver, president; E. C. Chapman and J. T. Wood, vice-presidents. Citizens have liberally subscribed to carry on the work of the organization, which will be placed immediately in the hands of a salaried secretary. The new body is determined to leave nothing undone to bring to the attention of investors the opportunities of their community and its advantages of favorable climate, water transportation six months in the year, fertile and cheap land, and coal and iron close by.

Laundry for Hot Springs.

D. N. Hitchcock, P. O. Box 398, Hot Springs, Ark., writes to the Manufacturers' Record that there is opportunity for a man of experience with \$20,000 capital to establish a steam laundry at Hot Springs, and adds that hotels and rooming houses of the city, more than 200 in number, are prepared to contract by written agreement their laundry work for years ahead to some person who will put in a first-class plant.

Defy Walking Delegate.

The Harbison-Walker Refractories Co. has always insisted on the privilege of conducting its plants for the best interests of its stockholders, and to preserve their integrity of management have eliminated the "walking delegate" as a disturbing element among the company's employees. A local paper, commenting on the attitude of the Harbison-Walker Company toward the strike leaders, says:

"A fresh example of the overthrow of this species is instanced in the strike which occurred at the plants of the Harbison-Walker Refractories Co. The com-

pany has now succeeded in completely overcoming the trouble without having to submit to the exorbitant demands of the strike leaders, and the various works are now running up to the mark set before the strike. This will be welcome news to the iron and steel manufacturers and smelting trades, among whom the products of the Harbison-Walker plants is the accepted standard for use in blast furnace and open-hearth linings, etc. The labor now employed has been carefully trained, and will not bow to the lash of the "walking delegate," and as the output of the plants have been increased, the employees are assured undisturbed prosperity with a wage commensurate with their ability.

"It would be well for labor leaders to count the cost before embarking into unwarranted and dangerous strikes. Experience has demonstrated time and again that the greatest injury done by a strike is to the strikers themselves. The 'walking delegate' loses nothing. It is the credulous victim of his folly and mischief who is the real loser."—American Manufacturer of Pittsburg.

Sewerage at New Orleans.

About sixty-six miles of sewerage pipe and two miles of water mains are to be laid at New Orleans, and the sewerage and water board of that city has been calling for bids, which will be opened on February 2. The piping will range in size from eight to twenty-eight inches, and the contracts will call for about 2600 tons of cast-iron pipe, 113 tons of special castings and other appurtenances.

Mr. George R. Brown, secretary of the Little Rock Board of Trade, points to the increase in the bank clearings of that city as evidence of its commercial growth. In 1903 the clearings amounted to \$52,288,174, an increase of \$3,766,192 over those of 1902.

A dispatch from Freeport, Ill., is to the effect that a syndicate of farmers in Illinois, Iowa and Wisconsin are contemplating the establishment of a chain of canning factories in the South stretching from Northern Georgia to Eastern Texas.

A new company, of which Mr. A. E. Martin of Fayetteville is general agent, has been organized to operate a steamboat line on the Cape Fear river between Wilmington and Fayetteville, N. C.

The house of representatives of Kentucky has passed a bill appropriating \$1,000,000 for the erection of a new State Capitol at Frankfort, and it seems assured that the senate will also pass the bill.

The Memphis Merchants' Exchange has elected Messrs. W. G. Thomas, president; W. E. Holt, vice-president; C. W. Schulte, treasurer. Mr. N. S. Graves is the secretary of the Exchange.

The Business Men's Association of Ashland, Va., is endeavoring to encourage the growing of cucumbers by nearby farmers for the pickle factory at Fredericksburg.

The Lynchburg Board of Trade has elected Messrs. D. C. Jackson, president, and John C. Dabney and O. B. Barker, vice-presidents. Mr. J. A. Faulkner is secretary.

It is announced that Mr. T. D. Love of Wilmington, N. C., will operate a line of steamers between Columbia and Georgetown, S. C.

More than 6000 homeseekers on their way to Oklahoma, I. T., Texas and New Mexico passed through Kansas City one day last week.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

WORLD'S FAIR PLANS.

Wabash Railroad Will Make Extensive Improvements for Traffic.

The Manufacturers' Record has received from Mr. W. S. Newhall, chief engineer of the Wabash Railroad, blueprints showing the work to be done by the company to provide transportation facilities at the World's Fair grounds at St. Louis. The Wabash Railroad runs close to the grounds, and its present double-track line will be widened to five tracks between Union avenue and Forsythe Junction, a distance of about 3000 feet. Immediately east of Forsythe Junction four platforms will be provided for handling passengers. At this point the main tracks will be on the extreme outside of the line, the eastbound on the south and the westbound on the north. A short distance east of these platforms switches will be arranged extending to a number of stub tracks, nine of which are to be used as special and private car storage tracks and two tracks for shuttle trains, that is, trains which will run to and from the Union Station in the heart of the city of St. Louis.

Adjoining the platform conveniently a depot building will be erected with a general waiting-room, 100x110 feet, and numerous other apartments, including four spaces for classifying passengers, each space being 30x50 feet. The entire building will measure about 160x170 feet. Three interlocking machines are also to be provided—one of thirty-five levers at Union avenue (thirty-two being working levers), another of fifty-two levers at the World's Fair ground (fifty-one being working levers) and a third of forty levers at Forsythe Junction. The provision made for the classification of passengers in the depot is expected to facilitate in a great degree the handling of crowds of passengers, inasmuch as those intending to take certain trains will be, respectively, classified before the entrance gates are opened. Contracts for most of the work have been let.

For the local business between the Union Station and the World's Fair grounds specially-constructed cars are to be used, with side entrances to the seats, so as to make them easy to load and unload.

FAIRMONT TO BELLVIEW.

Proposed Extension of the Fairmont & Clarksburg Traction Co.

The Fairmont & Clarksburg Traction Co. proposes to build an extension from Fairmont, W. Va., to Bellview, and the Manufacturers' Record has obtained from an official source the following facts: The proposed extension will shortly be built. The direction will be northward, and the new line will have as its objective point the new addition called Bellview, which is situated about one mile north of the heart of the city. The position of this suburb is such that its future growth is assured. The Baltimore & Ohio Railroad Co. has spent over a million dollars in yards, roundhouses and other improvements contiguous to the ends of the railroad divisions which meet there.

It is further stated that the topography is such that Bellview is the only convenient resident section for the railroad employees, and it will have to depend upon the street railway extension to keep in close touch with the city proper. A new car line will also go through the Jackson addition, a very desirable resident portion

of the city, besides passing the cemetery and the fair grounds, the latter heretofore being dependent upon hack lines for transportation facilities. A half-mile extension beyond Bellview will bring the new line to Barnestown, a station on the Baltimore & Ohio Railroad. The shaft mine of the Fairmont Coal Co. is located there, and employs several hundred men, most of whom live in the city. These, with several minor industrial operations, and with the population of the northern part of the city, promise success for the proposed extension. The coal company, it must be noted, is interested in the street railway.

The principal construction feature of the new line will be a bridge across the Baltimore & Ohio Railroad and Buffalo creek. This structure will be about 400 feet long and 70 feet high. All work will probably be done by contract. L. L. Malone is general manager, and H. V. Hesse is chief engineer, with general offices at Fairmont, W. Va.

This expansion of the street-car line, which is operated by the Fairmont & Clarksburg Traction Co., is another evidence of the progress of Fairmont, which has grown greatly within the past two years. The original railway, traversing the two principal streets, conducted for several years a desultory local business, but within the past year the new controlling interest has shown its aggressive policy by doubling the length of the original line and constructing track over fully one-quarter of the distance from Fairmont to Clarksburg. The hilly nature of the country will make the proposed new extension difficult and expensive of construction, but it will also encourage business for the line, as the hills are tedious obstacles to vehicle and foot passengers along the ordinary roads.

MT. AIRY TO ROANOKE.

Electric Railway Projected to Cross the Blue Ridge Mountains.

Mr. Charles Hamon Stanley writes from Laurelfork, Va., to the Manufacturers' Record concerning the railroad which it was reported he and others were promoting. He says:

"Our electric road from Mt. Airy, N. C., to Roanoke, Va., seems assured. It will be about eighty-five miles long. From Mt. Airy it will go across the Blue Ridge mountains near Fancy Gap, and from there by way of Hillsville and Laurelfork, Va., crossing Buffalo ridge about four miles east of Buffalo mountain; thence through Floyd Courthouse, from there following Little river near the Bent Mountain road, crossing Bent mountain and leading direct to Roanoke. At Mt. Airy the line would connect with the Southern Railway, and at Roanoke with the Norfolk & Western, making a direct line to both Northern and Southern markets.

"Having just completed a trip over the entire route, I find great inducements for such an enterprise, as this road will open up a fine farming country, mining district and one of the best oak-timber belts in the United States. This leads me to believe that we will have one of the best-paying lines of its length in the country.

"We will manufacture our electricity by water-power near Floyd Courthouse. That point being the center of distribution, we will have no loss of power."

AUGUSTA RAILWAY DEAL.

Change of Control Proposed in the Augusta-Aiken Company.

A report from Augusta, Ga., says that Mr. James U. Jackson, president of the Augusta-Aiken Railway & Electric Co., and associates will close a deal to secure a controlling interest in that company, which controls the Augusta Railway &

Electric Co., the North Augusta Electric & Improvement Co., the Augusta & Aiken Railway Co., the North Augusta Hotel Co., and the North Augusta Land Co. It is also stated that all these companies will have their meetings on February 1, and that Mr. Jackson will be elected president of each of them; furthermore, that as a result of Mr. Jackson's deal, which involved the raising of \$900,000 to \$1,000,000, the management of all the companies will now be located in Augusta. Mr. William E. Bush, it is stated, assisted Mr. Jackson in his work, among the stocks which are said to have been secured being \$200,000 held by the General Electric Co. and a block of shares owned by John L. Williams & Sons of Richmond and J. W. Middendorf & Co. of Baltimore, who will retain some interest in the properties.

Features of a Steel Tie.

The steel railroad tie invented by Edward McConnell, C. E., Richmond, Va., is made in the shape of an inverted L, each flat surface being six inches in width, the length of the tie being the same as that of other railway ties. The rail is fastened to the upper side of the tie, while the other side goes down into the ballast. The lower edge of this latter is corrugated to prevent slipping or sliding. The corrugated stem is also slightly wedge-shaped. On the upper side or bed of the tie the extreme edge is slightly turned upward and notched in two places to receive the rails, which are fastened to the tie by clips and bolts. Another design shows a T-shaped tie, the corrugated flange extending down the middle. Another pattern, of which mention has heretofore been made, is a perfectly flat steel tie twelve inches wide without a stem. These ties are to be made of half-inch steel. The device for fastening the rails to the ties is said to be of such character as to prevent either the bolt or any other part from working loose. The ties are capable of being adapted to any weight of rail. The inventor further claims that the construction of the tie is such as to deaden all sound produced by the running of trains, the whole surface of the tie being in immediate contact with the ground or ballast.

Gulf & Ship Island Railroad.

During the calendar year 1903 110 vessels cleared from Gulfport, Miss., the southern terminus of the Gulf & Ship Island Railroad. The world-wide business of the port is shown by the fact that thirty-seven of these vessels went to the West Indies, thirty-two to Europe and Africa, twenty-three to South America and eighteen to various other points. These vessels had a total net registered tonnage of 119,878 tons, and carried 105,849,422 feet of lumber. The growth of the port is illustrated by the fact that in the first six months of the current fiscal year more vessels cleared from Gulfport than during the entire last fiscal year. Thus sixty-six vessels, carrying 66,129,657 feet of lumber, cleared from Gulfport during the six months ended December 31, 1903, as compared with fifty-six vessels, carrying 47,232,765 feet of lumber, during the entire fiscal year ended June 30, 1903. The channel has been dredged to a depth of twenty-four feet, and the greatest draft of any vessel that has come to Gulfport up to the present time is twenty-three feet seven inches.

Royal Blue Book.

The Book of the Royal Blue for January is a very entertaining number. Persons interested in stories of the past will find "The Footsteps of Revolution," by Elihu S. Riley, and "Vincennes, Ind., the

Old and the New Town," by H. F. Baldwin, very agreeable reading. An article of general interest is a description of the World's Fair Palace of Transportation and of the transportation exhibit for St. Louis, and another is about the government printing office. "The Great American Peanut," by R. M. Cheshire, is a contribution that will doubtless meet with general perusal, treating, as it does, of a product known and appreciated wherever theaters and other places of public entertainment exist and where circuses visit. The magazine is excellently illustrated, and a neat finish is given to its contents by several contributions of verse.

Winnipeg to the Gulf.

Mr. H. Leone Miller, president of the Winnipeg, Yankton & Gulf Railway Co., writes from Oak, Neb., concerning the proposed line, which is designed to extend from Winnipeg, Manitoba, to the Gulf of Mexico. He says: "We are ready to begin construction, and are now trying to secure contractors who can take a part or all of this work and complete it ready for trains to run on, except the steel bridges across the Missouri, Elkhorn, Loup, Big Blue, Little Blue and Republican rivers. These contracts are let to the Missouri Valley Bridge & Iron Co.

"We wish to push this work as fast as possible, so as to find a way of relieving this section of the country of the surplus of grain now lying in the bins and stacks for want of cars to haul it to market."

Midfield to El Campo and Glidden.

Mr. E. B. Cushing, assistant to the president New York, Texas & Mexican Railway Co. (Southern Pacific system), writes from Houston, Texas, to the Manufacturers' Record that the proposed line from Midfield north will leave the line of the Tres Palacios branch (New York, Texas & Mexican) at Midfield; thence in a northerly direction to El Campo, on the main line of the New York, Texas & Mexican; thence northward, intersecting the San Antonio & Aransas Pass at or near Altair; thence to Glidden, on the main line of the Galveston, Harrisburg & San Antonio. This road will probably be sixty-five miles in length. The construction of the line is not authorized, and the present survey is being made with a view of ascertaining the probable cost, etc.

New Railroad for Texas.

A new railway company that promises to be of no little importance to Texas will probably be organized in the near future. Mr. P. A. McCarthy, C. E., consulting engineer, of Lufkin, Texas, writes the Manufacturers' Record that he is investigating the topographical features and resources of the tributary territory in behalf of the interests behind the project, and will submit his report soon. It is said the road will run from Sabine Lake via Beaumont, through Central and Northwestern Texas, and traverse the richest territory in the State for natural resources. It is further remarked that several prominent Texas citizens are among the interested parties, and that the headquarters will in all probability be established at Waco.

Pine Bluff to Hazen.

Mr. E. D. Russell, secretary of the Commercial League of Pine Bluff, Ark., writes the Manufacturers' Record that a company is being formed to obtain a charter and construct a railroad from Pine Bluff to Hazen, Ark., on the Choctaw, Oklahoma & Gulf Railroad, which is now part of the Rock Island system. This proposed line will be about forty miles long and will cross some of the richest farming land and the most heavily-tim-

bered section of the State. The headquarters of the company will be at Pine Bluff, and interested parties may address Mr. Russell for information.

Street-Car Line.

Mr. A. H. Rogers, president of the Southwest Missouri Electric Railway Co., writes from Joplin, Mo., to the Manufacturers' Record that the company has purchased the interests of the Mineral Cities Railway, a projected road within and near the city of Joplin, but that this deal will only involve the building by the Southwest Missouri Company of a local road about two miles long inside the limits of Joplin. All the construction material for this road is on hand.

Raleigh & Pamlico Begun.

Construction work has begun on the proposed Raleigh & Pamlico Sound Railroad, which is to extend from Raleigh, N. C., to Washington, N. C., at a point about nine miles east of Raleigh and three miles from the Neuse river. J. W. Bradshaw is superintendent of construction, and T. M. T. McKennon is chief engineer. Capt. J. M. Turner is president of the company; C. B. Barbee, vice-president and treasurer, and E. B. Barbee and others are also interested.

Will Build an Electric Railway.

Mr. C. A. King, treasurer of the Federal Oil Co. of Kentucky, 739 Stock Exchange, Chicago, Ill., writes the Manufacturers' Record that a syndicate in which he is concerned has in contemplation the building of an electric railway from Burnside to Monticello, Ky., but also says that the plans are not sufficiently advanced to give data. It is expected to take up this proposition soon.

Now in the Western Union.

The Western Union Telegraph Co. has taken over the telegraph lines of the West Virginia Central Railroad, amounting to about 250 miles of telegraph. This change is the result of the acquisition of the West Virginia Central by the Gould system.

Railroad Notes.

The Louisiana & Arkansas Railway has an extensive movement on foot for colonizing the lands along the line, and has people coming from many States. As these lands are cheap and closely akin to the famous Red river bottom lands, a heavy increase in the importance of that section is expected in the near future.

President A. F. Daley of the Wrightsville & Tennille Railroad Co. writes from Wrightsville, Ga., to the Manufacturers' Record that the only information he has relative to an extension of the line from Hawkinsville to Perry is contained in newspaper reports, and that no action has been taken by the management to justify such rumors.

Mr. George S. Shafer, superintendent of the Norfolk & Portsmouth Belt Line Railroad, writes from Norfolk to the Manufacturers' Record that the proposed improvements at Pinner's Point find their existence principally in newspaper reports, but he further says that the company does propose to build about one mile of sidings during the year.

Mr. T. J. O'Donnell writes from Perkins, O. T., to the Manufacturers' Record that the O'Donnell Construction Co., chartered with \$60,000 capital, is for the purpose of grading a railroad from Kansas City, Mo., to Duluth, Minn., with branch lines. The company has now sixty-five teams and other equipment and expects to begin work by April 1.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

A Farmer on Cotton.

Col. Le Roy Springs of Lancaster, S. C., who is a cotton planter, cotton manufacturer, merchant, railroad president and banker, visited the other day the Manufacturers' Club at Charlotte, N. C., and the Evening Chronicle of that city details the following conversation between him and Mr. John M. Miller, a banker, of Richmond. "How is cotton?" he was asked.

"It's all right," answered the colonel. "A little high, perhaps?" suggested Mr. Miller.

"Not at all," said the colonel. "At present prices cotton would be a profitable crop. The fair cost of raising cotton on an average is nine cents, and the difference between nine cents and present prices in a short crop like this is no more than a fair profit."

"If nine cents is the cost, how did people live when cotton was five and six cents a pound?" inquired a club man who was attracted by the colonel's approach.

"Those who depend on a cotton crop alone when cotton was six cents didn't live," answered Colonel Springs. "When cotton was six cents the cotton farmers, white and black, had no money, didn't have a decent change of clothes and everything was mortgaged. A price of cotton based on labor under pauper conditions is no honest price at all. The present betterment in price is because people have quit raising cotton under those conditions to do something else. When cotton was six cents it meant that the colored cotton farmer could not give his wife or daughter a change of one garment of underclothing once a year. I wouldn't want to live in a country where the women of a farmer's family cannot have more than one chemise a year."

"If a cotton plantation be operated on business principles and the planter pay fair wages, he can't get out at less than nine cents for cotton and have fair returns on his investment. Nine cents for cost of production for a farm of cotton, including interest on capital, is about the same as seventy cents for a bushel of wheat or forty cents for corn, and everybody knows that wheat at a price below seventy cents or corn below forty cents is a losing crop. Since the price of cotton fell below ten cents a majority of planters have broke all to pieces, both in the Eastern and Western cotton States, properties have been sold and the families of individual cotton farmers have lived like paupers, not having in many cases a change of underclothing once a year."

The colonel had advanced to the middle of the lobby of the club and quite a crowd had gathered around him.

"How can we hold the practical monopoly of cotton production at prices above ten cents?" inquired a member.

"Well!" said Colonel Springs, "I don't know that it would be desirable to undertake to control the production at a price less than nine or ten cents. If the foreigner wants to make good cotton at less, then lets let him do it and we will buy it and manufacture it and get more money for manufacturer and employer than we could get out of cheap cotton. England

has been playing that game with us, and I think we have now got to the point of making England pay us a fair price or let her make the cotton in Africa, Egypt or India, and we will buy it cheap and make the profit on turning it into cloth."

"However, we are not up against that sort of question now. There seems to be a lot of smoke, but I've seen mighty little fire as yet on this production of cotton in Africa and other countries whose cotton-producing capacities are not yet well or even approximately well known. For my own part, I think we have the soil, the climate and the people right here in the South. Cotton-producing conditions mean a climate which is mildly temperate, a sharp frost for a reasonable period of the year, labor which understands the business and a people who have the mechanical ability to devise and operate machinery for ginning and other preparation of cotton for the market. We've got all these conditions. Many countries have one or two of them, but no other country has all of them. I have no apprehension about losing the monopoly of production at anything like ten cents. We didn't lose it during the Civil War at eighty cents, and we didn't lose it immediately after the same war at twenty-five cents."

"Have you bought cotton for your factories, colonel?" inquired a number.

"Certainly," answered the colonel.

"Why certainly?" was asked.

"Well!" reflected the colonel.

"The operation of a mill rests as much in buying the cotton right as in keeping the wheels turning. I've laid in a stock because I thought that as a rule the mill which buys its year's supply in the three or four months when the farmer is putting the crop on the market will come out all right in the long run. There's no fixed rule, however. It takes judgment to buy cotton, and the man charged with buying for a mill must have the judgment."

"How are the factories going to come out with this high-priced cotton?" asked some one in the crowd.

"No reason why they shouldn't come out all right," said Colonel Springs. "Let them raise the price of goods proportionate to the increased price of cotton."

"Will the people pay the increase?" was asked.

"Pay the farmer a living price for his cotton and then he will be able to pay a fair price for cotton goods, and he will be willing also."

"How do you know what the farmers will be willing to do?" asked a young man.

"Because I am a farmer," promptly answered the colonel, and then the crowd laughed.

The colonel looked disgusted that anybody should be moved to smile because the biggest cotton planter in South Carolina calls himself a farmer.

"Cotton goods are bound to go higher in price all the same," said the colonel, as he went off to write a letter.

Expended About \$40,000.

Announcement was made in November of the organization of the Continental Manufacturing Co. and its purchase of the old Victor Cotton Mills at Charlotte, N. C. The improvements undertaken have since been in progress and have now been completed, some \$40,000 having been expended. The company has thoroughly repaired the old machinery and installed new equipment where necessary. It now has 12,672 producing spindles and 6188 twister spindles, which will be in operation within thirty days. Looms will probably be installed this spring.

Will Have 5000 Spindles.

The Calumet Manufacturing Co. of Liberty, S. C., was referred to last week as

having completed organization, its initial investment to be \$100,000. O. A. Robbins of Charlotte, N. C., who was named as one of the directors, will be the engineer in charge of construction. It has been decided that an equipment of 5000 spindles be installed for the production of fine combed yarns. Construction work will begin in the near future, and the plant is expected to be ready for operation by October next. H. L. Clayton is president.

To Manufacture Yarns.

Messrs. A. H. Pollock, D. R. Bird, J. W. Rhyne and J. F. Whisonant have purchased the Blacksburg Spinning and Knitting Mill at Blacksburg, S. C., at receivers' sale. They have applied for incorporation of the Buffalo Mills, and will remodel the Blacksburg plant into a modern yarn mill. J. R. Killian, now superintendent of the Olympia Cotton Mills at Columbia, S. C., is also an incorporator. The capital stock is \$20,000, with privilege of increase to \$100,000.

The Cotton Movement.

In his report for January 22 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 144 days of the present season was 7,664,245 bales, an increase over the same period last year of 36,164 bales; exports were 4,358,620 bales, an increase of 266,108 bales; takings by Northern spinners 1,259,073 bales, a decrease of 11,922 bales; by Southern spinners 973,220 bales, an increase of 8949 bales.

To Double Its \$100,000 Mill.

At a meeting of the directors of the Cox Manufacturing Co. on January 23 it was decided to double the plant. An increase in capital stock from \$100,000 to \$200,000 has been authorized and arrangements will be made to undertake the construction work and purchase the required machinery this year. This mill manufactures fine yarns exclusively, and to double its equipment indicates the installation of 12,500 spindles. It is located at Anderson, S. C.

Riverside Cotton Mills.

Some dispatches regarding the fire last week at the Riverside Cotton Mills, Danville, Va., were somewhat exaggerated. As a matter of fact but little damage resulted, as the automatic fire-protection equipment operated admirably and confined the fire to the spot where it originated. The damage by water was slight, and the mill resumed operations the following morning.

For Textile Capital.

Mr. M. J. Franklin of No. 373 South Pryor street, Atlanta, Ga., writes to the Manufacturers' Record that he knows of a town of 4000 inhabitants on a Georgia railway which would donate a site for a cotton mill and possibly exempt from taxation for some years. The cotton receipts of the town are 20,000 bales annually, which could be increased to 40,000.

Textile Notes.

Mobile (Ala.) Cotton Mills has declared an annual dividend of 5 per cent.

Linn Mills Co., China Grove, N. C., has declared an annual dividend of 6 per cent.

Mooresville (N. C.) Cotton Mills has declared a semi-annual dividend of 3 per cent.

It is reported that Alex. T. Hamilton of Rome, Ga., has submitted a proposition to build a cotton mill at Guthrie, O. T.

Groeg Seugel of Fort Smith, Ark., is

negotiating with Eastern capitalists for the establishment of a cotton mill to be capitalized at \$50,000.

Ebird Manufacturing Co., Albemarle, N. C., is reported as having ordered 5000 spindles additional. It has just declared a semi-annual dividend of 4 per cent.

Messrs. D. P. Sloan and R. C. Mattison of Anderson, S. C., have installed an equipment of machinery for manufacturing handkerchiefs, output at the start being thirty dozen daily.

Victor Manufacturing Co., Greens, S. C., may possibly enlarge its mill during the coming summer, but has no definite plans in regard to improvements. It now has 27,000 spindles and 700 looms.

Odell Manufacturing Co., Concord, N. C., has declared a semi-annual dividend of 3 per cent. During the past year this company has replaced 10,000 spindles with new equipment. Its total is now 42,000 spindles and 1800 looms.

A dispatch from Elkin, N. C., states that the Chatham Manufacturing Co. of that city has received a contract for 6000 pairs of blankets to be shipped to one purchaser in St. Louis. Many other large orders are being filled by the mill.

Scotland Neck (N. C.) Knitting Mills will install a new engine and generator, providing facilities for operating its entire plant by electricity. Forty additional knitting machines will also be installed. Contracts for the new equipment have been awarded.

Louisville (Ky.) Girth and Blanket Mills has been incorporated, with capital stock of \$30,000. This is the incorporation of an established plant which has an equipment of 370 spindles, two shoddy pickers and other machinery for manufacturing blankets, girths, rope, etc. Charles B. Semple and associates are the incorporators.

Messrs. Hugh MacRae & Co., bankers, of Wilmington, N. C., have issued a broadside presenting important data about ninety cotton mills in Virginia, North Carolina, South Carolina, Georgia and Alabama. The information includes facts about the capital, dividend rate, equipment, character of the goods, the power, selling agents and the officers of the mill corporations.

Another large plant just completed is the Watts Mills of Laurens, S. C. It has begun operations with 30,000 spindles and 700 looms, being 5000 spindles more than has previously been stated. The company occupies a site of 253 acres of land, having large buildings of modern mill construction to accommodate its mechanical equipment. High-grade cloth is being manufactured. The capital stock of the corporation is \$300,000.

QUOTATIONS OF COTTON YARNS.

By Buckingham, Paulson & Co., New York, Philadelphia and Chicago, January 25.

No. 10s-1 and 12s-1 warps.....	21 1/2 @ 22
No. 14s-1 warps.....	22 1/2 @
No. 16s-1 warps.....	23 @
No. 6s to 10s yarn.....	30 @ 21
No. 12s-1.....	21 1/2 @
No. 14s-1.....	22 @
No. 16s-1.....	23 @
No. 8s-2 ply soft yarn.....	21 @
No. 10s-2 ply soft yarn.....	22 @ 22 1/2
No. 8s-2 ply hard.....	21 @
No. 10s-2 ply hard.....	22 @ 22 1/2
No. 12s-2 ply hard.....	23 @
No. 14s-2 ply.....	23 1/2 @
No. 16s-2 ply.....	24 @ 24 1/2
No. 20s-2 ply.....	25 @
No. 24s-2 ply.....	26 @
No. 28s-2 ply.....	27 @
No. 32s-2 ply.....	28 @
No. 36s-2 ply.....	29 @
No. 40s-2 ply.....	30 @
No. 8s-3, 4 and 5 ply.....	21 @
No. 20s-2 ply chain warps.....	25 1/2 @
No. 24s-2 ply chain warps.....	26 @ 26 1/2
No. 28s-2 ply chain warps.....	26 1/2 @
No. 32s-2 ply chain warps.....	27 @
No. 16s-3 ply hard twist.....	23 1/2 @
No. 20s-3 ply hard twist.....	25 @
No. 24s-3 ply hard twist.....	26 @

On account of the condition of the market, prices are nominal.

COTTONSEED.

Increase in Oil Mills.

In its review of the packing-house industry during the year the National Provisioner says that the cottonseed-crushing industry has been in a healthy condition in spite of a slackening in the foreign demand. It adds: "There were more cottonseed-oil mills chartered or built in 1903 than in any one year since the inception of the oil-mill business. There were about 150 new mills on the list for this year. It is roughly estimated that \$10,000,000 was expended in new mills, soap and fertilizer plants connected with them and in cottonseed-oil-mill improvements during the past twelve months. The cottonseed-oil mills have gradually entered the domain of the beef-feeding business and are enlarging their success in this trade zone."

Cottonseed Products Exported.

During the past calendar year 935,856,960 pounds of cottonseed cake and meal, valued at \$10,529,909, were exported from the United States. In 1902 the exports were 1,135,430,825 pounds, valued at \$13,361,195. Of cottonseed oil 27,865,212 gallons, valued at \$10,931,540, were exported, a decrease of 7,034,408 gallons and \$3,220,225 in value.

District managers and officials of the Southern Cotton Oil Co. discussed last week at Savannah plans for an exhibit at the St. Louis Exposition.

PHOSPHATES.

Georgia's Fertilizer Law.

Commissioner of Agriculture O. B. Stevens of Georgia has issued a circular calling attention of importers, manufacturers, jobbers, dealers and manipulators to the recent act regulating the sale of fertilizers and fertilizer material in bulk to persons who desire to purchase the same for use on their own land, and not for sale. The act compels registry on the part of importers or others and a statement of the source from which the acid phosphate, nitrogen and potash are obtained, and of the guarantee placed upon the goods. The commissioner must be notified of the delivery of the goods, to whom sold and the number of tons shipped, etc., and ten cents per ton must be paid to the department for each ton delivered or shipped.

Fighting the Boll-Weevil.

As a means of combatting the boll-weevil, Mr. F. J. Merriam of Atlanta suggests that a fertilizer analyzing 10 per cent. phosphoric acid, 2 per cent. ammonia and 4 per cent. potash would be just the thing to hurry the cotton crop to maturity before the boll-weevils could ravage it, and that such a fertilizer applied at the rate of 400 pounds per acre would make the crop at least a month earlier than no fertilizer, to say nothing of the increased yield.

A bill in the lower house of the South Carolina legislature providing for the erection and equipment by the directors of the State penitentiary and plans for the manufacture and sale of commercial fertilizer was killed last week.

During the next month 500 carloads of agricultural machinery from Chicago for ports on the Black sea are to pass through New Orleans.

Secretary George Nees of the Augusta Chamber of Commerce has received an inquiry regarding the deposits of potters' clay near that city.

MECHANICAL.

Business of Southern Contractors.

An illustration of the extent of the business operations of some of the leading engineering and contracting firms of the South is given in a letter to the Manufacturers' Record from Joseph McWilliams & Co., engineers and contractors, of Louisville. Referring to some of the important contracts which they have recently secured or have in process of construction, they say:

"We have just closed the contract with the Seelbach Realty Co. for the complete mechanical equipment of its new 10-story hotel, which is to be erected at the corner of Fourth and Walnut streets, this city. The building is now under construction. Our contract covers the installation of 600 horse-power in boilers, three 125-kilowatt electric generators direct connected to tandem compound engines, switchboard, electric wiring and conduit for the building, passenger and freight elevators, complete heating and ventilating apparatus for the building, and a 15-ton ice-making and refrigerating plant. The scheme of ventilation consists of fans located in the sub-basement of the hotel, taking air from a shaft which opens above the second story. This air is forced through ducts by fans to the office or rotunda and the various cafes of the building. During the winter time this air is heated by being passed through steam coils. Other fans withdraw the foul air from these spaces and discharge the same into a foul-air shaft which is extended above the roof. In addition to this, separate fans located on the roof withdraw the foul air from the lavatories of the building.

"We have recently closed a contract with the United Shoe Machinery Co. for the heating and ventilating of its new factory, which is being erected at Beverly, Mass. The buildings under construction at present are three factory buildings, each 580 feet long, 60 feet wide and four stories high. These buildings are constructed entirely of concrete, and will be the largest of their kind in the country. The heating and ventilating is accomplished by the fan system. Between the several buildings are connecting wings, which are used for lavatories, washrooms, for gymnasium purposes, etc. In the basement of these wings is located the heating apparatus, having hot-air ducts extending the full length of the various buildings, with branch ducts connecting to the air flues leading up to the various stories. These air flues and ducts are entirely outside of the main buildings, so that the light is not obstructed, nor is any floor space taken up. Separate exhaust systems are provided in connection with the lavatory wings above mentioned for removing the foul air.

"We are just completing a 2000-horse-power boiler plant in the Central Indiana Hospital for Insane, Indianapolis, Ind. Stirling water-tube boilers are used, with Robins system of coal conveying.

"We are just finishing up the complete mechanical equipment of the buildings of the Dayton Arcade Co., Dayton, Ohio. These buildings consist of a large market-house, two five-story office buildings and one five-story apartment-house. The basement below the market-house is devoted to general cold-storage purposes, and a 60-ton refrigerating plant has been installed for refrigerating these rooms, the butcher boxes, dairy boxes, etc., in the market-house and the refrigerators in the apartment building. There is also installed 600 horse-power in water-tube boilers and 350-kilowatt capacity in electric generators direct connected to tandem compound engines.

"We have the contract for and will soon commence the construction of the complete mechanical equipment of the United States courthouse and postoffice at Indianapolis, Ind., which is now being erected. The contract embraces the power plant, heating and ventilating, electric wiring and conduit, elevators, water-supply system, etc. The boiler capacity to be installed in this building is 600 horse-power.

"We have almost finished the complete mechanical equipment of the United States courthouse, postoffice, etc., at San Francisco, Cal. This is one of the largest buildings of the kind in the United States. In this building we installed the boiler plant, consisting of 650 horse-power in Heine water-tube boilers, 450-kilowatt capacity in electric generators direct connected to tandem compound engines, heating and ventilating apparatus, elevators, electric wiring and conduit, plumbing and gasfitting.

"We also have in progress the mechanical equipment of the National Home for Disabled Volunteer Soldiers at Johnson City, Tenn. Our contract at this institution covers the complete equipment of the power-house, in which is installed 1200 horse-power in water-tube boilers, 350-kilowatt capacity in electric generators

attaching to the reciprocating engine. The following, taken from a descriptive pamphlet, will therefore attract attention:

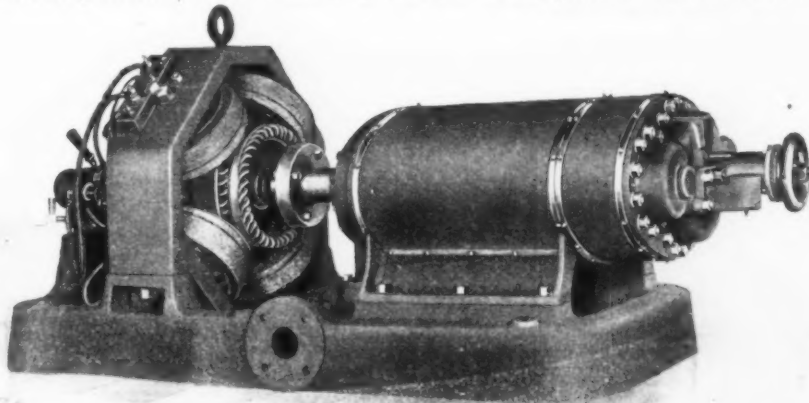
"The theoretical advantages of the rotary over the reciprocating type of steam engine are so well recognized as to require hardly more than mere mention here. The desire to obtain higher mechanical efficiency by applying steam pressure continuously in one direction rather than intermittently and in reverse directions, eliminating the strains due to inertia and momentum of reciprocating parts and opening the way to higher rotative speeds, with their concomitants of low first cost and compactness, has been present from the first, and there has never been a time in the history of thermo-dynamics when the study of this subject has not engaged the minds of engineers as a class, and even of many among the non-technical public.

"The problems, however, involved in the attainment of the object sought have been numerous, and their solution peculiarly difficult. Chief among these has been the question of securing steam-tight joints between the moving element and the containing shell or casing, the rate of movement at such joints being necessarily so high as to inhibit any known method of providing a working

the question of tight steam joints has ever been the first and most serious problem to be considered in any attempt to produce the ideal 'rotary' engine. Engineers of international reputation, possessed of unlimited means and facilities for experimentation, have labored vainly for years upon this elusive problem. All other difficulties have sunk into insignificance beside the one great enigma: How to make and maintain a satisfactory working steam joint between the rapidly-moving rotating members and the stationary casing or shell? All considerations of functional operation were secondary to the prime requisite of keeping the steam in the engine until it should accomplish its work of pushing the wheel around.

"In approaching this apparently simple, though by all tradition insuperable undertaking, due respect was paid to the 'experience of the ages.' The history of the subject was most carefully studied with a view to determining, if possible, the law or laws governing the problem, and the explanation of the remarkable succession of fruitless attempts to solve it.

"The problem as finally deduced from obtainable facts by careful analysis was found to consist practically of a single proposition: the elimination of mechanical friction. This much had been more than



THE WARREN ROTARY ENGINE.

direct connected to tandem compound engines; also the heating and ventilating apparatus in six large barracks buildings, the Carnegie Library, the laundry, storehouse and morgue; also the underground system of steam distribution for conveying steam from the power-house to all of these buildings and to several other buildings on the reservation; also the underground system of electric distribution for conveying the electric current for lighting and power to all of the buildings on the reservation, and for a system of arc lights distributed about the grounds of the institution."

The Warren Rotary Engine.

There has always been great interest shown in the possibility of producing a practical rotary steam engine. An interesting type of such an engine, herewith illustrated, has been invented by Mr. Edward C. Warren, and its recent commercial introduction promises to have an important bearing upon the great problems of power generation, the engine seeming to present a remarkable harmonization of the distinctive merits of the two accepted types of prime mover at present disputing possession of the field, namely, the simplicity and compactness of design and higher rotative speed characteristic of the turbine, and the controllable operation and more comfortable working conditions

contact. All possible designs of rotary engine have likewise seemed to essentially embody a variety of vitiating evils, such as unbalanced lateral pressure exerted upon large areas of the revolving part; wasteful port, passage and cylinder clearances; contracted passages, requiring the steam to flow at impossible rates; mutually acting cycloidal members, subject to heavy unbalanced pressure, tending to force them apart; sliding vanes or wing pistons, subject to centrifugal strains, with consequent excessive friction and vibration, etc. Many such mechanisms have been constructed, and the long unbroken record of failure has imbued the minds of many practical engineers with the belief that the solution of the problem is not to be looked for with any confidence in the present state of mechanical development. Nevertheless, the distinctive advantages of the rotary type of prime mover have been so obvious and the necessity for realizing them in some fields has become so imperative as to bring forth various designs of steam turbine, and those advantages, despite the costly and delicate construction and excessive speeds of operation which appear to be unavoidably characteristic of the turbine, have availed to secure for it earnest and lavish promotion, wide discussion and considerable tentative use.

"It is pretty generally understood that

suspected in the beginning, though the antiquity of the problem seemed to forebode manifold inherent complexities.

"To establish and maintain a frictionless steam joint, then, became the principal consideration, and it is in the solution of this primary difficulty that the key to the successful design of the Warren Rotary Engine is to be found.

"Perfect mechanical contact, maintained without appreciable pressure between the contacting surfaces, is the principle which has at last made the 'Rotary' an accomplished fact. Frictionless joints having been secured, rendering the rotary type of engine an operative possibility, the no less vital feature of functional operation and economy of first cost, weight and bulk have been dealt with on the same logical basis, with the result that a design has been evolved which, without including any of the characteristic limiting features of the standard type of engine or turbine, possesses every feature considered desirable or required in the best modern engineering practice."

The engine is being placed on the market by the Rotary Engine Co., which will supply on request copies of the descriptive pamphlet. Offices in the Keystone Telephone Building, Philadelphia.

Oyster packers of Biloxi, Miss., are shipping their goods as far north as Ohio.

LUMBER.

THE YEAR IN SIX STATES.

Production in the Southern Lumber Manufacturers' Territory.

Reports from 395 mills in Missouri, Arkansas, Texas, Louisiana, Mississippi and Alabama represented in the Southern Lumber Manufacturers' Association showed, according to the report of Secretary George K. Smith of the association, an output in 1903 of 4,762,791,778 feet, an increase of 226,000,000 feet over the output of 365 mills in 1902. This output is between 80 and 90 per cent. of the total production of the six States.

"Our clearing-house summary for 1903," said Secretary Smith, "compiled from 293 mills, shows 3,108,000,000 feet cut, showing an increase over the 175 mills in 1902 of 446,000,000 feet cut.

"Consumption—Shipments from 395 mills in 1903, as compared with 365 mills in 1902, show an increase as follows: Shipped 1902, 4,387,000,000 feet; shipped 1903, 4,706,000,000 feet; increase, 319,000,000 feet.

"Clearing-house record of shipments: 175 mills, 1902, 2,597,000,000 feet; 203 mills, 1903, 3,078,000,000 feet; increase, 481,000,000 feet.

"Total stock on hand January 1, 1903, among 365 mills was 997,494,502 feet. We have received accurate reports from nearly 100 mills for amount on hand January 1, 1904; and have estimated stock for balance, using a small per cent. of increase, which was shown by comparing the totals of the 100 mills for 1903 and 1904.

"The estimate for 395 mills in six States is 1,059,000,000 feet on hand January 1, 1904, an increase of 82,000,000, with thirty more mills included than for January 1, 1903."

In his annual address reviewing the transportation difficulties of the year, President N. W. McLeod said:

"This has been a subject of anxious thought by the best minds in railway circles, and I believe that the railway companies will, as far as possible, co-operate with the lumber interests in bringing about a better condition. In some of the Eastern cities the railway companies have large storage sheds, in which lumber is stored at a nominal rental. It is possible that this system could be inaugurated in the West at many of the important consuming points, where considerable quantities of the lower grades of lumber could be moved during periods when other tonnage was not heavy and be stored at such points, and in this way partially relieve the congestion of lumber tonnage during the period of greatest tonnage movement."

Mr. McLeod urged the appointment of a standing committee of three members on transportation, and in view of the bright prospects for the year he further said:

"To obtain full advantage of these favorable conditions it will be necessary to obviate ruinous competition. Some of our members lose sight of the fact that reducing sale values below the market, manipulation of grades, special terms and special agreements, all actuated by selfish motives, while possibly of temporary advantage to the offender, always react, and are the direct cause of our product for the year being sold below values justified by the law of supply and demand. A bad practice of whatever nature indulged in reacts in ultimate loss to the offender. When this is understood by our members greater interest will be manifested in the association statistical work, and every member will promptly give the information desired by our secretary, resulting in accurate information as to supply and demand, not only as a general proposition,

but as to specific items, which knowledge should be an asset and make itself felt in a practical way in our annual balance-sheet."

The association elected Messrs. R. A. Long of Kansas City, president; J. L. Kaul of Birmingham, vice-president, and A. J. Niemeyer of St. Louis, treasurer; N. H. Clapp, Arkansas; H. H. Wheelless, Louisiana; Sam Park, Texas; D. H. Marbury, Alabama; J. C. Enoch, Mississippi; J. H. Berkshire, Missouri; H. H. Tiffin, Georgia; P. F. Camp, Florida, vice-presidents, and C. D. Johnson, Arkansas; J. D. Long and J. W. Martin, Louisiana; L. Davidson, Texas; F. H. Lathrop and John B. Rider, Alabama; C. S. Carpenter and J. J. White, Mississippi; W. C. Greer, Missouri; H. A. Graham and William Stillwell, Georgia; A. E. Ranney and J. C. Anderson, Texas, directors.

The association will meet at St. Louis during the exposition.

SOUTH CAROLINA TIMBER.

Large Tract Sold to a Baltimore Lumber Interest.

Mr. R. E. Wood of the R. E. Wood Lumber Co. of Baltimore has secured through Capt. R. E. Johnston of Greenville, S. C., land in fee and timber rights amounting to from 37,000 to 40,000 acres in Pickens and Oconee counties, South Carolina, embracing the holdings of the Benedict-Love Company of Calhoun, S. C. These lands border upon the waters of the Keowee, Toxaway, White Water and Horse Pasture rivers, whose waters are sources of a great amount of power which may be utilized in developing the tract.

Regarding this purchase, which includes saw-mills, planing mills, dry-kilns and between 3,000,000 and 5,000,000 feet of logs in the river now floating to the mills, Mr. R. E. Wood informs the Manufacturers' Record that in addition he has purchased 13,000 acres in Transylvania county, North Carolina, which reach within one and one-half miles of the Transylvania branch of the Southern Railway, together with rights of way to that road. The Montvale Lumber Co. will be incorporated in South Carolina to embody these purchases and to construct a narrow-gauge road with steel rails to the plant operating this tract. Mr. Wood adds regarding the purchases:

"This is a very choice piece of timber land on the southern slope of the Blue Ridge mountains, containing about 45 per cent. of yellow poplar, 30 per cent. of white oak and the balance white pine, hickory, chestnut and hemlock. Our cruisers have estimated, and the report has been verified by my brother, G. L. Wood, and myself, who spent four weeks on this property, that the cut will range from 350,000,000 to 400,000,000 feet. We have purchased the saw-milling plant and have already engaged our rails, railroad equipments, etc., for the Transylvania county operation."

Pine Bluff's New Mill.

Mr. E. D. Russell, secretary of the Commercial League of Pine Bluff, Ark., informs the Manufacturers' Record that the contract for the buildings of a hardwood mill and veneering plant at Pine Bluff by the Pine Bluff Lumber & Veneer Co., now being organized at Crawfordsville, Ind., by Messrs. Hill, Ward & Voris of that State, will be let about February 1. It is expected that the plant, which will employ about fifty men, with a weekly pay-roll of \$800 or \$1000, will be in operation by July 1 next. This industry is only one of a number which have been secured for Pine Bluff within the past twelve months through the enterprise of the Commercial League. The citizens of Pine

Bluff through the league have donated to the new company twenty acres of land in the eastern part of the city accessible to free railroad switches and to spurs from all the trunk lines entering the city.

Forests in Foreign Trade.

Of the total value, \$1,457,575,865, of domestic exports during the past calendar year, \$64,132,420 represented products of the forest. Of this amount, \$49,572,426, an increase of \$10,173,832 over 1902, was the value of unmanufactured wood, including timber, logs, lumber and staves. The value of manufactures of wood was \$13,634,065, an increase of \$1,196,201 over 1902. The quantities exported included 567,351,000 feet of sawn timber, 4,003,581 cubic feet of hewn timber, 1,325,522,000 feet of lumber and 37,396,000 shingles, 40,761,189 staves and 30,552,552 pounds of wood-pulp. Of naval stores 2,599,512 barrels, valued at \$5,950,257 were exported. That was a decrease of 1,298 barrels and an increase of \$1,324,311 in value.

White Pine Disappearing.

Reports from Duluth, Minn., are to the effect that the only two districts in the whole Northern pine region showing no decline in cut during the past year are the Duluth and Upper Mississippi river districts; that the white-pine cut of Michigan is almost at an end, and that within a few years the Chicago district will be reduced to a few million feet of odds and ends, scrapings of once vast forests.

Turpentine From Shavings.

Fant Bros. of Anderson, S. C., write to the Manufacturers' Record for information about the possibility of distilling at a profit crude turpentine from common planing-mill shavings of pine lumber with the average of resin. They write that they are in a position to secure an ample supply of raw material for a plant to be installed on a small scale and at a comparatively low cost.

Large Deal for Timber.

A representative of Alfred Beling of Antwerp, Belgium, one of the largest lumber and timber importers of Europe, has negotiated with mills on the line of the Mobile, Jackson & Kansas City Railroad for the delivery of 100,000,000 feet of timber annually for a number of years. It is expected that the timber will be exported through Mobile.

Exports From Mobile.

In the first three weeks of this year there were exported from Mobile 2,553,951 feet of pine lumber, 1,856,978 feet of pine timber, 471,997 feet of sawn timber, 6377 feet of hewn timber, 129,000 feet of cypress lumber, 460,046 staves, 173,689 headings and 1000 crossties.

Austrian Stave Trade.

It is estimated that the stave trade at Trieste, Austria, is greatly depressed, 40,000,000 staves awaiting consumption in France alone, and that a sound condition of the market there can be induced only by cessation of production for a year both in Europe and America.

Creosoting Companies Wanted.

The Standard Pole & Tie Co. of 133 Front street, New York, writes the Manufacturers' Record that it wants to "get into communication with some creosoting companies in the Southern States that are in position to creosote promptly an order for yellow-pine ties."

Wants Farm and Timber Land.

In a letter to the Manufacturers' Record G. C. Terry states he is desirous of

securing a 10,000-acre tract of land in Alabama, Mississippi or Louisiana, which is part farm land and balance in timber. Address Mr. Terry at 19 Cole Building, Nashville, Tenn.

For Shuttle Machinery.

Mr. Lee Albertson of Sarecta, N. C., is planning to begin the manufacture of shuttles, and is seeking information about the machinery needed, the raw material and the market for the products.

Lumber Notes.

Four carloads of poplar were shipped last week from Charlotte for use in a German cooperage factory.

Low water in the Tennessee river is delaying shipments of oak and poplar to the hardwood dealers of Chattanooga.

More than 10,000,000 feet of lumber, not including shingles and laths, were shipped from Georgetown, S. C., in December.

The Kirby Lumber Co. of Texas has a contract for the delivery this year of 2,000,000 feet of crossties to the Santa Fe system.

During the past five weeks the shipments from Gulfport, Miss., included 8639 feet of lumber and 776,000 feet of sawn timber.

The Kanawha Lumber Manufacturers' Association will meet next Saturday at Huntington, W. Va., to consider the appointment of a traffic committee.

Messrs. G. W. Morris, George Hollaner, W. H. Rosecrans and F. E. Rosecrans of Oberlin, Ohio, have been inspecting timber land in the vicinity of Savannah that is offered for sale.

A bobbin factory and a chair company are recent additions to the woodworking establishments of Ashboro, N. C., from which in the past millions of feet of hardwood have been shipped for manufacturing elsewhere.

The Pennsylvania Railroad Co. has planted 50,000 young locust trees on land owned by it in Pennsylvania, and it is understood that it proposes to plant within the next few years 1,000,000 trees to furnish material for crossties.

Mr. Herman Von Schrenk of the forestry division of the national Department of Agriculture is investigating the experiments in the Southwest of the Santa Fe Railroad in the better utilization of loblolly pine and the best manner of preserving railway ties from decay.

Turpentine operators in Florida and South Georgia are interested in plans of a recently-organized operators' tank and warehouse company to build ample storage facilities at Florida points for the benefit of operators who desire to hold back their product temporarily from the market.

The Mississippi Cypress Co. has just completed at Marks, Miss., a first-class band-saw mill of 40,000 feet daily capacity, equipped with 12-inch saws, steam feed, live rolls, etc. The plant will saw cypress only, and the entire product will be handled by the Plummer Lumber Co. of St. Louis.

United States Consul John H. Groul at Malta reports that a merchant there believes that he will be able to do considerable business in wood stock from America for doors and sashes, as prices which have been quoted to him are such as to enable him to compete with stock which comes now mostly from Austria-Hungary.

It is announced that William J. Crichton has resigned the secretary-treasuryship of the Red Cypress Lumber Co. of Macon, Ga., and Thomas L. Ross has been elected his successor. The company

named has an extensive plant for the manufacture of cypress lumber and shingles, and is well known to the trade. It is capitalized at \$200,000.

Pointing to the flood disaster last spring in the Paeolet valley, Governor Heyward of South Carolina urged in his annual message systematic work in forest preservation in the State. He said that at present no attention whatever is given to the subject, and under a policy of reckless waste the destruction of the forest may soon be complete. He urged that a beginning be made in the observation

of Arbor Day in every county in the State and in the planting of trees in city parks, around public buildings and along every roadside.

Because of the great quantities of suitable timber available in the South, there are many handle factories in that territory. One plant recently completed at Cooper, Texas, by Messrs. W. D. Moren & Co. is now beginning operations. It has an equipment of modern machinery installed in a main building 32x100 feet, the output being about seventy-five dozen daily. Many orders are being received.

INDUSTRIAL NEWS OF INTEREST.

Tennessee Coal Land Offered.

Operators or investors looking for coal lands are advised that a tract of 8000 acres in Tennessee is offered for sale by J. M. Gray, Jr., of Nashville, Tenn.

High-Grade Malleable Castings.

The Jeffroy Manufacturing Co. of Columbus, Ohio, through its connection with the Ohio Malleable Iron Co. of the same city, is now in the field soliciting orders for high-grade malleable castings.

To Finance a Weaving Plant.

An Englishman with twenty years' practical experience in cotton manufacture desires correspondence with some one who can finance a small mill. It is proposed to manufacture for home trade. Address Weaver, care of Manufacturers' Record.

For Manufacturing Purposes.

Manufacturers seeking suitable property on which to locate plant are invited to address Russell, Burdall & Ward Bolt & Nut Co., Port Chester, N. Y. This company has a favorable property on tidewater, for many years operated as a successful foundry.

Hardwood Timber Land.

There are some valuable tracts of hardwood timber land in Florida. A property containing 10,000 acres is offered for sale by W. E. Law of Brooksville, Fla. White oak, hickory, ash, gum, maple and live-oak magnolia, estimated to cut 3000 to 4000 feet per acre, is on the land.

Schonthal Iron & Steel Co.

On February 1 the Schonthal Iron & Steel Co. of Cumberland, Md., will establish a general sales and purchasing office at Columbus, Ohio, from which city the company's business will be conducted. The Cumberland office will also be continued. B. E. Schonthal will be in charge at both offices.

Missouri and Arkansas Mineral Lands

In Missouri and Arkansas there are many valuable mineral properties awaiting development to bring remunerative profits to investors and industrial operators. Various tracts of such lands are offered for sale by Killian, 2534 Caroline street, St. Louis, Mo. He invites inquiries from prospective purchasers.

For Huennekes Systems.

Two more plants for manufacturing sand-lime brick by the Huennekes system have been contracted for. They are for the Tennessee Granite Brick Co., Memphis, Tenn., and for Winchester Granite Brick Co., Winchester, Ky. The H. Huennekes Company of 114 Liberty street, New York, has the contracts to supply the machinery.

Steam and Coking Coal Lands.

About 15,000 acres of steam and coking coal land in Alabama, located near two railroads, is offered for sale. This property is near large deposits of manganese, iron ore and limestone. It carries four seams through its entirety, claimed to measure from thirty-six to fifty-seven inches in thickness. For particulars address the Montgomery Abstract Co., Montgomery, Ala.

To England and the Continent.

Manufacturers in all parts of the machine world are rapidly becoming acquainted with the merits of the Acme multiple-spindle automatic screw machine made by the National Acme Manufacturing Co. of Cleveland, Ohio. W. S. Chase, sales manager of the company, started for England and the Continent on January 16. He will travel about two months on a business trip.

Modern Axe-Handle Factory.

Because of the great quantities of suitable timber available in the South, there are

many handle factories in that territory. One plant recently completed at Cooper, Texas, by Messrs. W. D. Moren & Co. is now beginning operations. It has an equipment of modern machinery installed in a main building 32x100 feet, the output being about seventy-five dozen daily. Many orders are being received.

Automatic Sash Lock and Hinge.

An improved specialty now being introduced is the Hendricks automatic sash lock and hinge. It is manufactured by the Hendricks Manufacturing Co. of Waynesboro, Pa., and an illustrated leaflet describing the device is ready for mailing to applicants. The company is incorporated, with an authorized capital of \$15,000. H. C. Geist is president; V. B. Koontz, vice-president, and J. S. Strickler, secretary-treasurer.

Cotton Mill for Sale.

Opportunities to secure a modern cotton mill in the South do not often occur. But such an opportunity is seen in the offer for sale of the Gonzales Cotton Mills at Gonzales, Texas. This plant is entirely modern in every particular, has 5000 spindles, 150 looms, 250-horse-power steam plant, electric plant and other facilities for economical manufacturing. Address J. D. Sayers, Jr., president.

Natural Portland Cement Rock.

The final settlement of the Panama-canal question will result in a greatly increased demand for natural Portland cement rock properties. Manufacturers or investors likely to be interested in buying a cement property of 800 acres on navigation to the Gulf and Panama and on a trunk-line railway are invited to address P. O. Box 17, Rome, Ga. It is said the quantity of rock is inexhaustible, and that there is no overburden.

Enlarging His Territory.

The promotion, sale and financing of industrial and commercial enterprises in an enlarged territory is being undertaken by G. C. Terry of Nashville, Tenn. For thirteen years Mr. Terry has been engaged in the local real-estate business at Nashville, and his success has prompted this entrance into a more extensive field. He expects his work to be an active aid in the development of Southern resources. Offices at 19 Cole Building.

The Office Outfitters.

An important contract has been secured by the Fielder & Allen Company, "The Office Outfitters." It calls for furniture, carpets, files, hundreds of small office supplies, blank books, all kinds of improved printing and duplicating devices and other specialties used to facilitate the conduct of modern business. These furnishings are to be installed in the United States army headquarters in Atlanta, Ga. The Fielder & Allen Company is of that city.

The Stafford Sale.

Messrs. J. E. Conant & Co., auctioneers, Lowell, Mass., announce that the mill real estate, with water-power and steam plant, of the Stafford Manufacturing Co. at Central Falls, R. I., was sold to the Pawtucket Electric Co. at \$47,000, plus the taxes for last year. The tenement property realized \$16,570. The machinery was sold in lots to buyers from all parts of New England, also from New York and Pennsylvania. They paid upwards of \$30,000. This sale was held by Messrs. Conant & Co. on the 20th inst.

Messrs. J. B. McClary & Co.

Demands in the Birmingham district and its contiguous territory continue for railroad, mill, mine and furnace supplies, also for electric railway materials. Messrs. J. B. McClary & Co. have entered this field as manufacturers' agents, and they offer their

services to the purchasing public. Mr. McClary was for some years manager of the electric railway system of Birmingham, and has a practical knowledge of the needs of his section. The firm's offices have been established at 229-230 First National Bank Building, Birmingham, Ala.

Federal Blueprinting Machines.

A new and improved apparatus for making blueprints by both sun and electric light, without the use of plate glass, is comprised in the Federal Blueprinting Machines. The new equipment has proven its practicability and the greatest satisfaction to even the most exacting buyers. It saves a great deal of time when printing by the electric light, and full details regarding its manufacture and its use should be investigated by all interested parties. An illustrated leaflet is now being issued by the maker of the Federal machine, Spaulding Print Paper Co. of 11 Federal street, Boston, Mass.

They Order Ball Engines.

The engines built by the Ball Engine Co. of Erie, Pa., are always in demand. For direct connection and other uses they have a reputation of excellence throughout the industrial world. The company's recent orders include the following: Eastman Kodak Co., Rochester, N. Y., two 400-horse-power vertical cross-compound engines for direct connection to 250-kilowatt Crocker-Wheeler generator; Union Ice Co., Bakersfield, Cal., 250-horse-power automatic engine; Sailors and Soldiers' Home, Grand Rapids, Mich., a direct-connected unit, and South Dakota Agricultural College, Brookings, S. D., an automatic engine.

Conveying and Elevating Machinery Orders.

Mill and labor-saving machinery from the plant of the C. O. Bartlett & Snow Co. of Cleveland, Ohio, is in great demand. The company's recent orders for conveying and elevating machinery came from Grasselli Chemical Co., Sherwin-Williams Company, Cleveland Gas, Light & Coke Co. and Farmers' Chemical Co., all of Cleveland, Ohio; Iroquois Portland Cement Co., Caledonia, N. Y.; Elk Rapids (Mich.) Portland Cement Co., Struthers (Ohio) Furnace Co., Sandusky (Ohio) Portland Cement Co. and St. Loran (Ohio) Coal Co. From Roseland (R. C.) Power Co. orders were received for mining machinery.

Standard Thread for Coach Screws.

Regarding threads on coach screws, notification is given that manufacturers of coach screws as given on the list below have adopted a standard thread on all coach screws to fit the Diamond Expansion Shield. The standard threads are as follows: 5-16 inch, 9 threads per inch; 3/8-inch, 7 threads per inch; 1/2-inch, 6 threads per inch; 5/8-inch, 5 threads per inch; 3/4-inch, 4 1/2 threads per inch. The following concerns will furnish standard coach screws: American Iron & Steel Co., Buffalo Bolt Works, W. H. Haskell Manufacturing Co., Hoopes & Townsend, Lamson & Sessions Co., Oliver Iron & Steel Co., Pawtucket Manufacturing Co., Pottsville Bolt Works, Upson Nut Co. and Payne Bolt Works.

Recent Sales by F. M. Hicks.

Manufacturers of and dealers in railway equipment have been busily engaged recently in supplying the demand. A number of the sales seen in the latest Hicks list are to well-known buyers. Among these is the Chicago Portland Cement Co., twelve dump cars; St. Louis, El Reno & Western Railway, twelve box cars, three flat cars and one caboose; Valley Railroad, ten box cars; Des Moines City Railway, ten flat cars; Hollandale Oil Co., ten tank cars, and many others. Eight locomotives and about 150 coaches, flat cars, dump cars, oil cars, theatrical coaches, logging cars, barrel cars, cordwood cars, etc., are included in the list. F. M. Hicks of the Hicks Locomotive and Car Works has offices in the Fisher Building, 27 Dearborn street, Chicago.

The British Johns-Manville.

The British Johns-Manville Company, Limited, has been incorporated in England, with offices and warehouses at 81 Fenchurch street, London, E. C. It will handle a complete line of overhead line material, "Vulcanite," "Molded Mica" and "Monarch" insulations, specially adapted for insulating railway motors, generators, controllers, are lamps, switch handles, switch boxes and various other pieces of apparatus requiring a high-grade insulating material; also a full and complete line of electric heaters, rail bonds and Sachs "Noark" enclosed fuse protective devices. A full and complete stock will enable the company to make prompt deliveries and give good service at all times.

Henry J. Joseph is the managing director, as well as manager of the London branch of the H. W. Johns-Manville Company of New York, with offices at the same address.

Steel-Bound Concrete Curb.

Municipalities, contractors and all others who have paving work to do should acquaint themselves with the merits of the steel-bound concrete curb. Its merits may be briefly summarized as follows: Handsome in appearance; continuous in construction, hence never out of line; cannot be displaced by frost; never requires resetting or repairs; prevents chipping or breaking on edges; has galvanized steel corner-bar. This is an ideal system for asphalt, brick or macadam roadways. The curb has already been extensively used, and as its merits become better known the demand for the system is steadily increasing. The Pennsylvania Railroad, New York Central Railroad, Boston & Maine Railway and other leading systems have used the steel-bound concrete curb for paving around their depots, and about 100 cities have it in use with the greatest success. Further details can be secured by addressing the Steel Protected Concrete Co., Real Estate Trust Building, Philadelphia, Pa.

Barrett's Amazon Roofing.

Roofing materials of special manufacture are now used in great quantities throughout the world. They are designed and presented to dealers and the trade for the most thorough protection of all kinds of roofs. Barrett's Amazon Roofing consists of a strong, fibrous, all-wool felt, thoroughly saturated with non-volatile compounds, making a plastic and pliable fabric that is claimed to be waterproof, vaporproof and airtight. The fabric is coated on both sides when manufactured—on the under side to protect against rising steam and other vapors, on the upper side to make it weatherproof, fireproof and lasting. The coating is a composition which, aside from its protective qualities, is extremely durable. It is adapted to any style roof and any climate. It is not a gummy preparation, containing nothing to ooze out in the hottest weather or crack in the coldest. In exploiting the merits of this roofing booklets and samples are being distributed to all likely to be interested. Those who have no information on the subject are invited to address the manufacturer, Barrett Manufacturing Co. of Philadelphia, the well-known roofing specialist.

Indicator Work by Mail.

A correspondence school to teach indicator work is about to be instituted, and instruction will be under the personal direction of A. C. Lippincott, for many years an authority in the use and designing of indicating instruments. Tests will be made and reported, which will involve the damaging of many instruments, to show the actual results of all usual maladjustments and wear—a feature not possible by anyone not in possession of unlimited number of instruments and perfect manufacturing facilities. It is intended to treat on this subject thoroughly. Reducing motions and planimeters, old, new, known, unknown, regular and "frank," will be described. Simple instructions for making these instruments in any small shop will be given. Instruments will be loaned at the company's risk, to be used in learning. Comprehensive instruction papers will be issued frequently to cover every point deemed material. Graduates of this course will be given a certificate, and some will be employed as representatives to enroll students and give local, personal instruction. Address the Indicator Instruction Co., Scranton, Pa.

Asbestos Manufacturing Co. of Philadelphia.

It will interest dealers in and users of the Asbestos Manufacturing Co.'s products to know that changes have been made in that company. On January 1 the company became known as the Asbestos & Magnesite Manufacturing Co., and removed from 425 Market street to 1280-1291-1292 Land Title Building, Broad and Chestnut streets, Philadelphia. The company's \$300,000 modern plant at Port Kennedy, Pa., is nearing completion, and a rich deposit of dolomite rock at the location has been purchased. Its daily output will be 20,000 pounds of carbonate of magnesite, and 85 per cent. magnesite steam-pipe and boiler coverings and magnesite cement will be manufactured. The previous extensive line of asbestos goods will also be continued. All the machinery of the old plant at 13th and Cumberland streets, Philadelphia, has been removed, and the building will be used for a warehousing and shipping establishment capable of filling large orders promptly. The company's president is Michael Elhott; vice-president and treasurer, Alvin M. Elhott; secretary, Alonzo Gibbons, and general manager, George P. Wilson.

CONSTRUCTION DEPARTMENT.

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY.

The Manufacturers' Record seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

ALABAMA.

Anniston—Stove Foundry.—The stove-manufacturing company reported some weeks ago has organized with Otis W. Snyder of Lexington, Ky., president; Charles W. Foushee, also of Lexington, treasurer, and W. T. Owens of Anniston, general manager. Construction of buildings has begun, and most of the machinery to be installed for manufacturing will be new. Capital stock is \$50,000.

Anniston—Brick and Tile Works. The Anniston Brick, Tile and Pottery Works, reported last week, will be owned by Frank P. Helfner of Atlanta, Ga., who was mentioned as one of the organizers. A plant for manufacturing daily 40,000 bricks, hollow tiles and other clay products will be built.*

Anniston—Iron spike Mill.—L. H. Kaplan and the Weller Forge & Foundry Co. are interested in a proposition to establish an iron-spike mill.

Birmingham—Metal Works.—The Ajax Metal Co. (an outgrowth of the Ajax Company of Philadelphia, Pa.) has purchased the Bates Metal Co.'s plant, referred to last week; will enlarge same and manufacture machinery, implements and tools from the rough. J. G. Hendrickson is president; H. S. Carpenter, secretary, and George Summers, general manager. Capital stock is \$30,000.

Birmingham—Hide and Iron Company.—Goldstein Iron & Hide Co., with capital of \$500, has been incorporated for dealing in scrap iron, hides, bottles, etc., by K. Koplin, H. J. Goldstein and others.

Birmingham—Safe Company.—Birmingham Safe Co. has been incorporated, with capital of \$200, by C. H. Seals, Turner Weakley and John A. Vance.

Birmingham—Steel-casting Plant.—J. R. McWane, formerly of Lynchburg, Va., but now of Birmingham, and reported recently as having organized \$50,000 stock company for establishing steel-casting plant in Birmingham, has, with W. T. Adams of Corinth, Miss., purchased the plant of the Hood Ma-

chine Co. and will continue the foundry and machine business in connection with the steel-casting plant, for which complete equipment will be installed at once. Company will be known as the Birmingham Iron & Steel Co.

Birmingham—Coal Mines.—Red Feather Coal Co. has been incorporated, with capital of \$20,000, for conducting coal-mining business. John W. Miller of Greenvale, Ala., is president; Henry W. Perry of Blocton, Ala., vice-president, and T. B. Perry, secretary.

Birmingham—Street-car Works.—Southern Street Car Manufacturing Co. has been organized to establish the street-car works reported in December as proposed. Capital stock is \$50,000, with privilege of increasing to \$100,000. Company will erect two-story building 300x300 feet, site for plant having been purchased at Ensley. W. L. Pilkinton of Virginia is president, and J. W. Gilliam, secretary-treasurer. Virginia and New York capital will be largely interested.

Gadsden—Water-works.—City has voted issue of \$100,000 of bonds for construction of system of water-works previously mentioned. Address The Mayor.

Heflin—Electric-light Plant and Water-works.—Frank F. Taylor, mentioned last week, is of Kemp Creek, Ala., and W. B. Merrill, also mentioned, is of Edwardsville, Ala. They have city franchise for establishing water-works and electric-light plant, the construction of which must begin within ninety days. In about sixty days estimates on machinery will be asked. Address Mr. Taylor. In these two plants and other propositions \$75,000 will be invested.*

Huntsville—Printery.—Daily Mercury Printery has been reorganized by Roy E. O'Neal, J. T. McLemore and John McBride.

Mobile—Lumber Mills.—Alabama Manufacturing Co. has been incorporated, with capital of \$50,000, for manufacturing veneer, lumber and other wood products. G. M. Rosengrant, Albert L. Wilcox, Frank N. Poe, all of Mobile, are the incorporators.

Montgomery—Brewery.—Capital Brewing & Ice Co. has been organized with Naham J. Grell, president; Emile Weil, secretary, and Isadore Weil, treasurer. It has purchased the property of the old Montgomery Brewery, and will rebuild same. Brick and stone buildings will be erected and the mechanical equipment will be modernized.

Montgomery—Live-stock Company.—Alabama Live-Stock Co. has been incorporated, with capital of \$500, by E. B. Martin, H. J. Packard and C. C. Packard, for conducting general live-stock business at Martin's Station.

New Decatur—Lumber Mill.—John Cathcart Lumber Co. has purchased fourteen acres of land at \$7500 as site for the establishment of a large lumber mill.

Selma—Brick Works.—Joseph Rosenbaum and A. G. Kuhn will establish the brick works reported last week. Contract for all the machinery has been awarded, and the output will be 50,000 daily.

Selma—Cotton Compress.—Selma Press & Warehouse Co. will build cotton compress, to be constructed before September 1.

Union Springs—Ice and Cold-storage Plant. Union Springs Ice & Cold Storage Co. has been organized and will establish \$7000 ice factory; A. W. Oliver, president and general manager.

ARKANSAS.

Batesville—Shoe Company.—Crescent Shoe Co. has been incorporated, with capital of \$500, by A. J. Martin, Joe Wilder, J. T. Martin and others.

Batesville—Stone Quarry.—W. J. Jones is developing limestone quarry near Batesville, and will erect kiln for burning lime.

Cerro Gordo—Mercantile.—Cerro Gordo Store Co. has been incorporated, with capital stock of \$12,500, with Frank Ogden, president, and J. N. Fortner, secretary.

El Dorado—Industrial.—Chartered: El Dorado Industrial Co., with \$80,000 capital, by E. H. Smith, E. O. Mahoney, H. B. Smith, W. D. Chew and others.

Fort Smith—Cotton Mill.—George Sengel is negotiating with Eastern capitalists for the establishment of a \$50,000 cotton mill.

Hamburg—Lumber Company.—J. H. Pryor, Sr., Charles J. Julien and Marshkeehn & Co. of Hamburg, Ark., have incorporated the Hamburg Lumber Co., with a capital stock of \$15,000.

Little Rock—Ice Plant.—C. L. Kraft Co., re-

ported incorporated last week with \$25,000 capital, states that the report that it will manufacture ice is an error; offices at 209 W. Third street.

Little Rock—Lead Mines.—Several errors in proper names were made in reporting the lead company mentioned last week. Correct title is the Moreau Lead Co., capitalized at \$24,000, and lead properties are to be developed. M. H. Johnson is president; R. D. O. Johnson, H. M. Armistead, E. B. Hanks and I. B. Davis, directors.

Little Rock—Creosoting Plant.—Crossland & Barringer of Guthrie, O. T., are reported as to establish a plant for creosoting line poles.

Magnolia—Water-works.—The city council will consider the granting of a franchise for the construction of water-works. Address The Mayor.

Manor—Syrup Mill.—W. S. Booth is interested in establishment of syrup mill, as lately reported. Plant will be erected and operated by the Manor Trading Co., and will have capacity of 1000 gallons of pure cane syrup a day; buildings will be 40x80 feet in size.*

Pine Bluff—Wagon Factory.—Local capitalists are interested in a movement to establish wagon works. Secretary of Commercial League, E. D. Russell, can be addressed.*

Pine Bluff—Cotton Gin.—James Gould will rebuild cotton gin recently burned; new plant to be a two 70-saw gin for capacity of twenty bales daily. About \$4000 will be invested. Contracts will be awarded this week.

Prescott—Drug Company.—Terry Brothers Company has been incorporated, with capital stock of \$10,000. George J. Terry is president; Howard Terry, vice-president, and Mildard M. Lavender, secretary.

Texarkana—Lumber Manufacturing.—Incorporated: The Zincoll Pole Co., with capital stock of \$25,000, for manufacturing telegraph, telephone and electric-line poles. J. B. King is president; D. C. Yingo, vice-president, and C. M. Conway, secretary-treasurer.

FLORIDA.

Fernandina—Ice Factory.—Fernandina Ice Co. is increasing capacity of its plant from ten to twenty tons a day.

Jacksonville—Timber Lands.—C. C. Quackebush of Philadelphia, Pa., and associates have purchased for development 60,000 acres of timber land in Hernando and Hillsboro counties. They will probably establish naval stores plants.

Ocala—Ice Factory.—Meffert & Taylor are erecting building, as recently reported, which they will equip as ice factory and operate as the Ocala Manufacturing Co. Buildings will be 90x120 feet and 26x42 feet; capacity fifteen tons of ice per day.

Pensacola—Starch Factory.—Horatio Keeler and A. H. Keeler of Chicago propose establishing a cassava starch factory to cost about \$100,000, daily capacity to be 150 tons. It is also proposed to equip for utilizing any by-products obtainable.

Tampa—Cigar Factory.—Stachelberg & Co., cigar manufacturers, will enlarge factory by erection of an addition 25x50 feet.

West Palm Beach—Street Improvements.—City will vote on February 2 to decide the proposed issuance of \$6000 in bonds lately mentioned; will use the entire amount for street improvements. Address The Mayor.

West Palm Beach—Telephone System.—East Coast Electric Light, Power & Ice Co. has petitioned for franchise to establish telephone system.

GEORGIA.

Athens—Belting Factory.—McConnell Belt & Leather Co. is the correct title of company lately reported as to build belting factory. Main buildings will be 47x160 feet, to contain machinery for manufacturing lace leather and leather belting. About \$50,000 will be invested. W. H. Shelton is secretary.*

Atlanta—Gas Plant.—Atlanta Gas Light Co. will erect steel and brick building to cost \$13,000 for holding 100 gas retorts, and another structure to cost \$8000 for storing coke; structural contracts have been awarded. These improvements will increase the company's capacity for manufacturing gas.

Atlanta—Paving Contractors.—Wm. H. Venable, T. E. Artrop, A. W. Palmer and others have incorporated the Asphalt Paving

Co., with authorized capital stock of \$100,000, to contract for laying asphalt.

Blakeley—Turpentine Plant.—Standard Turpentine Co. has completed its \$30,000 plant at Blakeley, and it is in full operation. Company has applied for charter, with capital of \$25,000. T. B. Womack and N. G. Carroll are incorporators. John W. Thompson is superintendent.

Calhoun—Corn and Flour Mill.—J. T. Black and Geo. C. Chambers of Augusta, Ga., will build corn and flour mill at Calhoun.

Savannah—Ice Plant.—W. W. Aimar will build an ice plant.

Dublin—Wagon Factory.—B. G. Rhodes & Co. of Nolan, Miss., have purchased plant of the Dublin Wagon & Machine Co., and will operate same.*

Gainesville—Planing Mill.—J. B. Mundy, R. E. Strickland and W. P. Gilstrap have purchased and will operate the Queen City Planing Mill.

Macon—Candy Factory.—Johnson, King & Co. will build an addition to their candy factory.

Millen—Electric Lighting.—R. E. Riley has made the city a proposition for electric lighting.

Quitman—Cooperage Plant.—Quitman Cooperage Co. will be chartered to build the barrel factory referred to last week; size of building to be 40x200 feet, containing machinery to manufacture daily from 100 to 200 spirit and syrup barrels. About \$2000 will be invested. J. L. Reuschmidt of Tifton, Ga.; S. S. Roundtree, J. W. Oglesby and others of Quitman are the incorporators.

Savannah—Brewery.—Savannah Brewing Co., J. Randolph Anderson, secretary, is enlarging its plant and increasing capacity twofold.

Valdosta—Gas and Ice Plants.—Consumers' Ice & Light Co., reported last week, has a subscribed capital of \$65,000, and will secure about \$20,000 more. It contemplates building an ice plant and a gas plant, construction of the latter to begin within thirty days. The electric plant previously mentioned is not contemplated. George W. Beckett of Savannah, Ga., mentioned last week, is organizing the company, and can be addressed.

KENTUCKY.

Ashland—Street Paving.—City council has passed ordinance for having paved eleven blocks of streets. Address The Mayor.

Clay City—Stave and Tie Company.—Love-land-Garrett Company has purchased the franchise and properties of the Climax Stave & Tie Co.

Covington—Zinc and Copper Ornaments.—Edwards Manufacturing Co., manufacturer of zinc and copper ornaments, and with principal office at Cincinnati, Ohio, has increased capital from \$20,000 to \$30,000.

Glasgow—Mercantile.—Barren County Grocery & Hardware Co. has been incorporated, with capital of \$10,000, by P. W. Holman, J. H. Gee and R. L. Witty.

Greenville—Transfer Company.—Merchants' Transfer Co. has been incorporated, with capital of \$2000, by L. W. Irwin, J. F. Green and H. C. Lewis.

Lexington—Coal Mines.—H. M. Bosworth is forming company to develop coal mines. Capital stock will be \$150,000.

Lexington—Tobacco Factory.—The Continental Tobacco Co. of New York contemplates the establishment of a factory.

Louisville—Woolen Mill.—Louisville Girth and Blanket Mills (an established plant) has been incorporated, with capital stock of \$30,000, by Chas. B. Sample and associates.

Louisville—Glass Works.—A. S. Berry of Newport, Ky.; John P. Starks of Louisville and associates will remodel and equip an abandoned plant for manufacturing beveled glass.

Louisville—Brick Works.—Louisville Fire-Brick Works, owned by K. B. Grahn and recently burned at loss of \$20,000, will be rebuilt at once.

Louisville—Coal Elevator.—D. X. Murphy & Bro. have made plans for coal elevator for Monongahela River Coal & Coke Co.

Louisville—Singletree Factory.—Hilton-Collins Company will rebuild its singletree factory recently destroyed by fire. New buildings will be much larger than 90x90 feet. An equipment of machinery for making 2000 dozen singletrees daily will be installed. About \$14,000 will be invested. J.

G. Fuller, secretary, is in charge; offices at 2200 Twelfth street.*

Madisonville—Coal Mines.—Royal Coal Co. has been incorporated, with capital of \$40,000, by O. L. Tindler, M. R. Ray and A. Holloman.

Maysville—Brick Works.—A. C. Spahr, S. M. Hall, E. A. Robinson and F. O. Barkley have incorporated Spahr Pressed Brick Works, with capital stock of \$100,000, for manufacturing bricks and other clay products.

Mt. Sterling—Gold Mining.—The Kentucky Diamond Mining & Development Co. of Minneapolis has been incorporated to develop gold mines in Elliott county.

Smithland—Water-works.—No definite arrangements have been made regarding the construction of the water-works reported last week, and correspondence with engineers is invited. Address The Mayor.*

LOUISIANA.

Bunkie—Ice Plant.—Bunkie Ice Co. has been organized to build the ice plant mentioned last week. Capital stock is \$25,000, and plant will have capacity of twenty tons daily. Contract has been awarded. G. W. Sentell is president; C. J. Pope, vice-president and manager, and W. D. Haas, secretary.

Franklin—Lumber Mill.—Kyle Lumber Co. will rebuild its saw-mill on extensive scale. Additional machinery will be installed and capacity increased.

New Orleans—Tin-can Factory.—The \$50,000 company recently reported has organized as the Southern Can Co. and begun the installation of machinery. It is now stated that the output will be 70,000 cans daily. Fred D. Becker is secretary.

Opelousas—Sidewalk Improvements.—City will probably arrange for construction of \$12,000 worth of sidewalks soon. Address The Mayor.

Poland—Cotton Gin.—Poland Gin Co. has let contract for the erection and equipment of a cotton gin to cost from \$8000 to \$7000.

Rayne—Cotton-oil Mill.—J. B. Wooten of Sarey, Ark.; E. L. Chappuis, Mervin Kahn and others of Rayne are negotiating for the erection of a cottonseed-oil mill.

Rayne—Brick Works.—Rayne Brick Co., Ltd., has been incorporated, with capital stock of \$50,000, to operate brick works, etc. Mervin Kahn and Eugene L. Chappuis of Rayne, A. C. Wuorpel, Ernest M. Loeb, Adolph Ricks and others are the incorporators.

Rosedale—Mercantile.—Incorporated: Henry Cohn, Jr., & Son, Ltd., with capital stock of \$30,000. Henry Cohn, Jr., is president, and Daniel Cohn, secretary.

MARYLAND.

Baltimore—Candy Factory.—Lauer & Suter Co. has been incorporated, with capital stock of \$200,000, for manufacture of candy, by John Lauer, J. W. J. Suter, Thomas G. Thorpe and others.

Baltimore—Silicate Mills.—Maryland Silicate Mills has been incorporated, with capital stock of \$12,000, for mining and manufacturing flint and other minerals. Incorporators are Michael J. Marz, Germanus France and Chas. F. Motz of Baltimore, William M. Plant and Albinus Schuck of Baltimore county.

Cumberland—Coal Mines.—Merchants' Coal Co. of Baltimore, Md., has purchased the mineral rights to 200 acres of land near Cumberland.

Frostburg—Tunnel.—Savage Mountain Fire-Brick Co. will open and develop a 600-foot tunnel and will install steam-drilling apparatus, air condenser and appliances.*

MISSISSIPPI.

Aberdeen—Soap Factory.—E. D. Coleman contemplates organizing a company to build a soap factory.*

Gulfport—Trading, etc.—Incorporated: Gulf Trading & Transportation Co., capitalized at \$100,000, by S. P. Moore, P. A. Dolan and others.

Gulfport—Industrial Company.—Incorporated: The Altruist Industrial Co., by J. R. Kelley, P. H. Tiffin and others.

Hattiesburg—Mineral Springs Improvement.—A. W. Montgomery of Hattiesburg has purchased the Rawls Mineral Springs, and will improve property by erection of additional buildings, etc.

Laurel—Oil Wells.—Company is being organized for development of oil wells. Address John Lindsey.*

Newton—Mercantile.—Walton Grocery Co. has been incorporated, with capital of \$50,000, by G. W. Walton and others.

Pontotoc—Cotton-oil Mill.—Company re-

cently formed for erection of cottonseed-oil mill has completed organization, electing O. J. Knox, president and general manager, and J. A. Powell, secretary-treasurer. Charter will be applied for at once. Capital is \$50,000.

MISSOURI.

Chillicothe—Electric-light Plant.—Company is being organized for establishment of electric-light plant. Address W. H. Sipple.

Farmington—Milling.—Glessing Milling Co. has been incorporated, with capital of \$50,000, by Henry Glessing and D. F. Peter.

Hannibal—Electric-light and Power Plant. City has voted issue of \$100,000 of bonds for electric-light and power plant recently reported. Bids will be received at once. Plant to be operated by steam. A. M. Nipper, superintendent in charge.

Jamesville—Flour Mill.—Houck & Flowers will erect flour mill to be operated by water-power; no contracts awarded.

Kansas City—Pipe Line.—Kahmann & McMurry have contract at \$24,000 for constructing a submerged pipe line under Kaw river.*

Kansas City—Telephone System.—Independent Telephone Construction Co. has been incorporated, with capital of \$100,000, for the purpose of constructing toll lines for the Home Telephone Co. J. S. Brailey of Toledo, Ohio, will be president, and C. O. Snyder, secretary-treasurer.

Kansas City—Gas and Oil Company.—Golden Rule Oil & Gas Co. has been incorporated, with capital of \$800, by Granville Smith, Walter B. Richards, A. Louis Ruhl and others.

Kansas City—Oil and Gas Company.—Synedate Oil & Gas Co. has been incorporated, with capital of \$200, by D. M. Pinkerton, W. J. Campbell, George Osmond and others.

Kansas City—Water-works Improvements. City Board of Public Works will construct 48-inch flow line to cost about \$160,000. Bids will be opened February 15 for different items of construction on the work. A bond for \$75,000 will be required of successful bidder.*

Macon—Manufacturing.—McCall Manufacturing Co., with capital of \$10,000, has been incorporated by G. Morris, P. L. Vasse, J. G. Sanderson and others.

Robertville—Flour Mill.—B. T. Rucker will remodel his flour mill.

Silver Springs—Lead Mines.—Silver Springs Lead Co. has been incorporated, with capital stock of \$50,000, for the development of lead mines, by Milton C. Brown, Henry W. Barth and Joseph J. Hauer.

St. Louis—Publishing.—Chartered: The Defender Company, with capital of \$25,000, for publication purposes, by Harry W. Cowl, Fred W. Sutton and Clarence D. Rhodes.

St. Louis—Packing and Storage Company.—Chartered: Orcutt Storage, Packing & Moving Co., with capital of \$50,000, by R. E. Orcutt, Herbert W. Orcutt, Frank E. Orcutt and others.

St. Louis—Photographic Company.—Chartered: World's Photo View Co., with capital of \$50,000, by R. W. Jorres, G. P. Foute, R. J. Guthrie and others.

St. Louis—Electric Battery Compound Company.—Electric Battery Compound Co. has been incorporated, with capital of \$100,000, by G. W. Groener and Frank M. Holmes of Marionville, Mo.; George W. Holmes of St. Louis and others.

St. Louis—Lumber Company.—Plummer-Benedict Lumber Co., reported recently as having increased capital from \$50,000 to \$100,000, has changed its name to Plummer Lumber Co.

St. Louis—Sheet-metal Factory.—Brown Stamping Co. has been incorporated, with capital stock of \$50,000, by Frank P. Crunden, Theophilus Counselman, Charles L. Martin and Charles G. Bowman; purpose, to manufacture and deal in sheet-metal goods.

St. Louis—Photographic Supplies Factory. Incorporated: The Schiller Dry Plate Co., with capital stock of \$50,000, by William Schiller, Richard Schiller and Morgan Rindel, to manufacture dry plates and other photographic supplies.

St. Louis—Wallpaper, etc.—Incorporated: August Kreikenbaum Wallpaper Co., with capital stock of \$8000, by Henry A. Kreikenbaum and others.

St. Louis—Novelty Manufacturers.—Chartered: The Manufacturers' Novelty Co., with capital stock of \$20,000, to manufacture and sell novelties. Incorporators are James T. Hayward, Henry Koehler, Jr., and Thos. H. Wagner of St. Louis, John F. Beal of Edina, Mo., and O. S. Chessman of Pittsburg, Pa.

St. Louis—Foundry, Rolling Mill, etc.—Chartered: Standard Truck & Forging Co.,

capitalized at \$600,000, for manufacturing and selling railway trucks, conducting foundry, rolling mill, etc. Frank G. Koehler, Ferdinand W. Huber and John O. Marshall are the incorporators.

Wentworth—Flour Mill.—J. M. Black and J. F. Black of Cassville, Mo., and David Dingler of McDowell, Mo., have purchased mill of Wentworth Milling Co., and will organize new company to operate it.

White Water—Flour Mill.—B. H. Bollinger has erected new building, and will remove his 50-barrel flour mill from Toga, Mo., to White Water, Mo.; will add some additional machinery.

NORTH CAROLINA.

Albemarle—Cotton Mill.—Eldred Manufacturing Co. is reported as having purchased 5000 spindles additional.

Ashboro—Bobbin Factory.—The Ashboro Bobbin Co. has been incorporated, with capital stock of \$20,000, for manufacturing bobbins, by W. D. Stedman, W. F. Redding and others. Reference to this enterprise as proposed was made several weeks ago.

Ashboro—Furniture Factory.—Incorporated: Piedmont Furniture & Manufacturing Co., with capital stock of \$30,000, for manufacturing furniture, etc., by H. J. Scarborough, W. C. Hammer and others.

Ayden—Buggy and Wagon Factory.—Ayden Milling & Manufacturing Co. has increased its capital stock 100 per cent., and will install machinery for manufacture of wagons and buggies.*

Charlotte—Cotton Mill.—Continental Manufacturing Co. has expended about \$40,000 for new machinery and to remodel the old Victor plant, which it purchased several months ago, as was reported. Probably looms will be purchased this spring. Present equipment is 18,800 spindles.

Durham—Furniture Factory.—W. R. Murray Company has been incorporated, with capital of \$50,000, for manufacturing furniture, etc., by W. R. Murray, W. C. Murray and others.

Gastonia—Mercantile.—J. S. Torrence and associates have organized the Torrence-Morris Company, with capital of \$8000, for conducting jewelry business.

Goldensboro—Drug Company.—Incorporated: Higgins Drug Co., with capital stock of \$25,000, by John R. Higgins, W. J. Jones, Jr., A. H. Edgerton, B. H. Griffin and the Humphrey-Gibson Company.

Graham—Sewerage System and Water-works.—City is in need of water-works system and sewerage. Parties interested in establishing such plants may address J. C. Simmons, mayor.

Greensboro—Drug Company.—Chartered: Fariss-Klutz Company, with capital stock of \$25,000, by John J. Fariss, A. J. Klutz and Clem G. Wright.

Henderson—Buggy Factory.—Corbett Buggy Co., reported last week as to enlarge its factory, will invest about \$50,000. Building is to be 120x200 feet. J. H. Brodie is architect in charge; output to be from 3000 to 4000 per year.

Kinston—Brick Works.—Kinston-Clarks Brick & Tile Co., which recently changed its name to Carolina Brick Co. and increased its capital stock to \$25,000, has purchased the plant of the Brick & Tile Manufacturing Co. at Hyman's Siding and fifty-two acres of land at Robersonville, where it will establish plant with capacity of 5,000,000 brick a year, which will make the company's total capacity 15,000,000 brick per year. L. Harvey is president; C. Felix Harvey, secretary-treasurer, and W. G. Jones, general superintendent.

Lenoir—Timber Lands.—It is reported that W. M. Ritter has purchased the timber properties of the Poncecardan Lumber & Manufacturing Co.

Lexington—Water-works, etc.—Lexington Light & Water Co. is arranging for the construction of a system of water-works. This company recently optioned and will purchase the old Lexington Electric Light & Telephone Co., and contemplates expending about \$75,000 to improve the plants. Possibly water-power properties will be developed to be used in connection with transmitting electricity for use by the several industries. Several thousand dollars have already been invested in betterments for the electric and telephone systems.

Murphy—Mercantile.—J. L. Smathers Co. has been incorporated, with capital stock of \$40,000, by J. L. Smathers, C. E. Wood and E. S. Miller.

Newton—Electric-power Plant.—Shield & Sons Co. of Providence, R. I., have, it is reported, optioned the shoals at Boston Mill, on the Catawba river, and will develop same

electrically for furnishing power to cotton mills in Newton and Maiden.

Oshorne—Cotton Gin and Grist Mill.—M. B. Nicholson will probably rebuild cotton gin and grist mill recently reported burned.

Pomona—Terra-cotta Plant.—Pomona Terra-cotta Co. will enlarge and improve its plant.

Rockingham—Mercantile.—Incorporated: Whitlock & Morrison, with capital stock of \$25,000, by Cameron Morrison, E. D. Whitlock and John Morrison.

Rocky Mount—Blount Brothers Co. has been incorporated, with capital of \$10,000, by N. O. Blount, W. C. Ward of Bethel, N. C., and John D. Blount of Rocky Mount.

Saginaw—Lumber Company.—Hazel Creek Lumber Co. has been incorporated, with capital of \$175,000, by R. E. Pendleton, James L. Hamill of Columbus, Ohio, and others.

Scotland Neck—Knitting Mill.—Scotland Neck Knitting Mill has contracted for engine, electrical generator and forty additional knitting machines.

Seroll—Corn and Saw Mills.—G. W. Stilwenter will build saw and shingle mill and corn mill.*

Smithfield—Mercantile.—R. O. Cotter, Harry Stevens and others have incorporated the Cotter-Stevens Company, with capital stock of \$20,000.

Spray—Furniture Company.—Incorporated: The Hall Furniture Co., with capital stock of \$10,000, by E. F. Hall and R. B. Chance of Reidsville, N. C., and James T. Smith of Spray.

Wilmington—Telephone system.—Bell Telephone Co. contemplates constructing system from Wilmington, N. C., to Florence, S. C., a distance of 110 miles.

Wingate—Mercantile.—J. L. Austin, J. L. Devine and W. M. Perry have incorporated the J. L. Austin Company, with capital stock of \$20,000.

Winston-Salem—Mercantile.—Chartered: J. W. Hester Co., with capital of \$10,000, by J. W. Hester and others.

Winterville—Brick Works.—Thad and Ora Manning will establish brick plant.

SOUTH CAROLINA.

Anderson—Handkerchief Factory.—D. P. Sloan and R. C. Mattison have installed equipment for manufacturing handkerchiefs; daily capacity thirty dozen.

Anderson—Cotton Mill.—Cox Manufacturing Co. will increase capital from \$100,000 to \$200,000 and add 12,500 spindles, doubling its plant.

Blacksburg—Cotton Mill.—Buffalo Mills has been incorporated, with an authorized capital stock of \$100,000, by J. F. Whisonant, A. H. Pollock, J. W. Rhyme and others. Company has purchased Blacksburg Spinning and Knitting Mill, and will convert it into a yarn plant.

Brunson—Cotton-oil Mill.—Cottonseed-oil mill will be erected. For particulars address D. F. Moore.

Calhoun—Timberland Development.—R. E. Wood Lumber Co. of Baltimore, Md., has purchased in Pickens and Oconee counties, South Carolina, land in fee and timber rights amounting to from 37,000 to 40,000 acres, including the building of the Benedict-Love Company of Calhoun, S. C., together with saw-mills, planing mills, dry-kilns and 3,000,000 to 5,000,000 feet of logs in river, which are now being floated to the mills; in addition company has purchased 13,000 acres in Transylvania county, North Carolina, and will construct narrow-gauge road, with steel rail to the plant operating this tract. All of the above-mentioned purchase will be embodied in a corporation to be known as the Montvale Lumber Co., to be incorporated under South Carolina laws.

Conway—Mercantile.—Chartered: L. H. Burroughs Company, with capital of \$10,000, by L. H. Burroughs and others.

Donalds—Lumber Mill.—May & Seawright will erect lumber mill.

Greer—Cotton Mill.—Victor Manufacturing Co. may possibly enlarge its mill during the summer; now has 27,000 spindles and 700 looms.

Lamar—Cotton-oil Mill.—Establishment of cottonseed-oil mill with capacity of twenty tons is contemplated. Names of interested parties will be announced later.

Liberty—Cotton Mill.—Calumet Manufacturing Co., reported last week, has decided on an equipment of 5000 spindles for fine combed yarns. O. A. Robbins of Charlotte, N. C., is engineer in charge. H. L. Clayton is president.

Spartanburg—Sheet-metal Works.—R. O. Pickens of Greenville, S. C., has established sheet metal works at Spartanburg.

St. Matthews—Mercantile.—Cain Mercantile Co. has been incorporated, with capital of \$500, by F. C. Cain and others.

TENNESSEE.

Brownsville—Canning Plant.—C. F. Harwood of Halls, Tenn., contemplates establishing canning plant at Brownsville.

Buena Vista—Flour Mill.—G. C. Spellings has purchased, will remodel, improve and operate the Garrettsburg Mill; contract for additional equipment not yet awarded.

Chattanooga—Lime Works.—Buquo Lime Co., with plant established, has been incorporated, placing capital stock at \$25,000. Improvements will be made, including the addition of a barrel factory. S. J. Buquo is president, and W. F. Orr, secretary-treasurer.

Chattanooga—Box Factory.—Consignee's Favorite Box Co. has purchased four acres of land adjoining its plant in Ridgedale, and will enlarge several of its buildings.

Chattanooga—Woodworking Plant.—Chattanooga Sash & Door Co. has been organized with D. W. Hughes, president; W. B. Hughes, secretary, and John M. Stivers, general manager. It acquires the established plant of Hughes Bros., manufacturing doors, sashes, blinds, shingles, etc. Capital stock is \$10,000.

Columbia—Pearl-button Factory.—J. C. Patterson and B. F. Sowers of Newton Falls, Ohio, represent Northern capitalists who contemplate establishing a pearl-button factory.

Dayton—Beverage Factories.—Robert Lyon contemplates establishing soft-drink factories in several Tennessee cities. He now has plant at Dayton.

Dyer—Canning Factory.—J. T. Staff is endeavoring to arrange with the farmers for tomatoes to ensure the continuance of his canning factory and possibly enlargement of the plant.

Kerrville—Oil Wells.—W. M. Bigham and John L. Rideout are said to be interested in the organization of company to bore for oil.

Knoxville—Distillery.—Robert H. Jones of Newport, Ky., will build a large distillery.

Memphis—Mercantile.—Chartered: Irby & Gilliland Co., with capital of \$60,000, by F. M. Gilliland, F. H. Irby and J. W. Taylor.

Memphis—Telephone System.—Memphis Long Distance Telephone Co. is arranging to expend \$1,000,000 for improvements and extensions to its various telephone lines, etc. It is stated that financial arrangements are now being perfected to provide the money. The company is now constructing lines throughout Tennessee and Mississippi.

Nashville—Steam-heating Plant.—Nashville Street Steam Heating Co. has amended its charter, giving it power to manufacture all tools and materials pertinent to its business, to make contracts for plumbing, sewerage and other similar work.

Nashville—Mercantile.—Incorporated: Geo. P. Staley Company, with capital stock of \$10,000, by Geo. P. Staley, C. B. Marshall and others.

Nashville—Stockyards.—John Hetterman of Louisville, Ky.; John Cudahy of Chicago, Ill.; W. J. Cummins of Nashville and associates have purchased the Union Stockyards at about \$130,000. They will consolidate this plant with others of a similar nature, possibly establishing a packing-house. It is stated that \$75,000 will be expended at once for new buildings.

Shelbyville—Cannery.—T. O. Tune will establish cannery.

Tullahoma—Cannery.—It is reported that A. & J. Myers of Indianapolis, Ind., will establish cannery at Tullahoma, recently reported as contemplated.

TEXAS.

Arlington—Mercantile.—Chartered: Collins Yates Company, capital stock \$25,000, by A. W. Collins, John Yates and S. R. Yates.

Aspermont—Mercantile.—A. W. Springer & Co. has been chartered, with capital of \$10,000, by A. W. Springer, William Jordan and others.

Ballinger—Light, Heat and Power.—Ballinger Light & Ice Co., reported recently as incorporated with capital of \$10,000 for supplying light, heat and power, succeeds the Ballinger Light & Power Co.

Batson—Oil Wells.—Higgins Oil & Fuel Co. of Beaumont has purchased nine acres of oil lands at Batson, and will expend \$100,000 in sinking wells and making other improvements.

Beaumont—Irrigation System.—Orange County Irrigation Co., W. A. Ward, secretary, is preparing to extend its canal and increase pumping plant to irrigate 3000 acres additional.*

Beaumont—Oil Company.—John Broughton, E. L. Bradley and L. Williams of Beaumont, Texas, have incorporated the Prairie Oil Co., with a capital stock of \$100,000, for the purpose of prospecting for oil.

Beaumont—Oil and Mineral Company.—E. L. Bradley, A. D. Sherman and L. Williams of Beaumont, Texas, have incorporated the Batson Oil Co., with a capital stock of \$10,000, for the purpose of prospecting for oils and minerals.

Brownsville—Irrigation System.—Chartered: Rio Grande Valley Irrigating Co., capital stock \$100,000, by H. C. Lindsey, S. L. Chalk and A. J. Bell.

Clarksville—Mercantile.—Chartered: Harris Bros. & Robins Dry Goods Co., with capital of \$20,000, by R. H. Harris and others.

Cleburne—Gas and Electric Plant.—Cleburne Gas & Electric Co. has been incorporated, with capital of \$150,000, by J. D. Olliger, S. C. Padelford and R. B. Stitche.

Commerce—Cotton-oil Company.—Commerce Cotton Oil Co. has increased capital from \$50,000 to \$100,000.

Dallas—Ice and Cold-storage Plant.—It is reported that the Anheuser-Busch Brewing Co. of St. Louis will erect ice and cold-storage plant in Dallas.

Dallas—Printing Plant.—Chartered: The Home & State Co., for printing and publishing purposes, by G. C. Rankin, Walter A. Stevens and Frank P. Holland.

Dallas—Grocery.—Incorporated: Parks & Momand Grocery Co., capital stock \$10,000, by J. F. Parks, C. E. Momand and J. C. Holbrook.

Denison—Dry Goods.—Incorporated: Denison Dry Goods Co., capital stock \$6400, by J. W. Hoeker, G. H. Wallace and J. T. Suggs.

Donalton—Mercantile.—Chartered: Donalton Mercantile Co., with capital of \$2000, by A. J. Elliott and others.

El Paso—Dairy.—El Paso Dairy Co. has increased capital to \$100,000.

El Paso—Carriage and Saddlery Company.—Todd Carriage & Saddlery Co. has been incorporated, with capital of \$5000, by M. L. Todd, A. L. Morgan and D. A. Todd.

Flatonla—Kaolin Factory.—S. G. Grimshaw of Houston, Texas; J. D. Bunting, J. A. Cadwell, E. A. Arnin and others of Flatonla are negotiating for the establishment of a kaolin factory.

Galveston—Pumping Station.—City contemplates erection of brick pumping station at water-works. Address The Mayor.

Georgetown—Mercantile.—Chartered: Georgetown Mercantile Co., capital stock \$20,000, by A. C. Dauchey, W. A. Shofner and M. B. Lockett.

Hempstead—Gas and Oil Wells.—Waller County Oil & Natural Gas Development Co. has been incorporated, with capital of \$15,000, by J. D. Harvey, J. C. Lipscomb, J. C. Ralston, R. R. Urban and others.

Henrietta—Oil-pipe Line, Refinery, etc.—W. B. Worsham, E. E. Dismukes, Eugene K. Pedrie, W. H. Chilson and others propose to organize a company with large capital for the purpose of constructing an oil-pipe line in the Henrietta fields; also contemplates building an oil refinery.

Hereford—Trading.—Galbreath-Fox Trading Co. has been incorporated, with capital of \$25,000, by J. H. Galbreath, J. A. Fox and T. J. Coffey and others.

Houston—Canning Plants.—I. V. Smith of Delphi and Wabash, Ind., contemplates establishing canning plants in Texas.

Houston—Mercantile.—Chartered: De Sola & Benbury Co., capital stock \$20,000, by Chas. De Sola, Thomas Benbury of Houston, and A. M. Friend of Dallas.

Houston—Smith-Wallis Iron Works will double the capacity of its plant in the near future.

Orange—Oil Wells.—Chartered: Lake Shore Oil Co., capital stock \$500, by J. T. Adams, J. A. Holland and J. W. Link.

Rockdale—Mercantile.—Chartered: Henne & Meyer Co., with capital of \$50,000, by Louis Henne, H. C. Meyer and E. B. Phillips.

San Antonio—Cattle Company.—Elsinore Cattle Co. has increased capital to \$100,000.

San Antonio—Saddlery.—Chartered: L. Frank Saddlery Co., capital stock \$150,000, by J. D. and D. J. Strauss and Simon Wallach.

Seguin—Mercantile.—Chartered: L. Hirsch Company, with capital of \$5000, by L. Hirsch and others.

Waco—Cotton Compress.—Chartered: Shippers' Compress Co., capital stock \$50,000, to maintain cotton compresses, etc.; incorporators, W. C. Lawson, Thomas Taylor, P. C. Negro-ponte, W. T. Woodward, D. Roman and J. L. Williams.

Waxahachie—Laundry.—Chartered: Waxa-

bachie Steam Laundry, with capital of \$10,000, by William McClanahan, W. G. Johnson and A. K. McWharther.

Wichita Falls—Mercantile.—Ed. H. Lysaght and J. A. Kemp of Wichita Falls, D. R. Coleman of Weatherford, Texas, and M. Lasker of Galveston, Texas, have incorporated the Coleman-Lysaght-Blair Company, with capital stock of \$200,000.

VIRGINIA.

Bedford City—Canning Plant.—H. M. Johnston will establish cannery to replace plant recently burned; capacity to be about 15,000 to 20,000 cases.

Chase City—Woodworking Factory.—Kershaw Manufacturing Co., manufacturer of shuttle blocks, bobbin heads, handles, etc., will enlarge its plant, as recently reported, investing about \$25,000.*

Covington—Flour Mill.—Alleghany Milling Co. has been organized for erection of 100-barrel flour and feed mill, as recently reported; building will be three stories, 40x75 feet, and capital to be invested is \$25,000. T. J. Smith is engineer, and C. W. Riech, architect and builder.*

Gate City—Flour Mill.—W. T. Jayne will build flour mill.*

Lewisburg—Brick and Tile Plant.—J. E. Campbell, Charles S. Dice, W. E. Nelson and others have incorporated the Caldwell Brick & Tile Co. to manufacture brick and tile. Capital stock is \$10,000.

Lynchburg—Hall.—Contract has been let to C. W. Hancock & Son at \$18,500 for the building of the Elks Home, to be three stories high, 65x65 feet; Lewis & Burnham, architects.

Portsmouth—Fertilizer Plant.—American Fertilizer Co. will rebuild its plant, reported burned at a loss of \$150,000.

Pounding Mill—Baryta Plant.—Weinman Baryta Co. has ordered Samuel B. Chandler of Bluefield, W. Va., to prepare plans and specifications for Weinman Baryta Co.'s proposed plant. It will cost \$10,000.

Richmond—Electric Plant.—A bill has been introduced in the legislature providing for the appropriation of \$25,000 for the establishment of an electric-light and power plant for the Capitol Building. Andrew J. Montague is governor.

Roanoke—Chemical Company.—Incorporated: The Southern Chemical Co., with capital stock of \$25,000. R. S. McCluen is president.

Roanoke—Cold-storage Plant.—Walter Seett will organize company to build cold-storage plant for general business.

Renevorte—Manufacturing.—Greenbrier Manufacturing Co. will increase capital stock from \$10,000 to \$25,000.

Norton—Foundry.—Norton Foundry Co. will be organized, with capital of \$25,000, by C. J. and Rudolph Schwank.

Staunton—Foundry and Machine Shop.—M. E. Swartzel and W. H. Rhinehart will establish foundry and machine shop.

Warrenton—Planing Mill.—Warrenton Planing Mill Co. has been incorporated, with capital stock of \$10,000, and R. E. Menefee, president.

Wheeling—Bridge Works.—Riverside Bridge Co. will rebuild one of its buildings destroyed by fire during the week. The loss in building and machinery was \$50,000.

WEST VIRGINIA.

Cameron—Gas-heating Furnaces, etc.—Cameron Little Wonder Gas Heating Co. has been incorporated, with capital of \$25,000, to manufacture gas and heating furnaces, by G. C. Jansen, R. Ryan, A. J. Wagner, I. R. Moise and others, all of Wheeling, W. Va.

Charleston—Foundry and Machine Shop.—Straw-Morris Machine & Foundry Co. has been incorporated, with capital stock of \$25,000, to operate foundry and machine shops. H. B. Lewis, H. L. Straw, Ham. Morris, Jr., S. B. Avis and L. W. Conch are the incorporators.

Charleston—Automobile Factory.—C. W. Root, E. M. Keadley, D. W. Patterson, W. C. Sammers and B. W. Fishback have incorporated the Kanawha Automobile Co., with capital stock of \$10,000, to manufacture and deal in automobiles.

Charleston—Advertising Company.—Incorporated: Columbia Advertising Co., capitalized at \$10,000, to paint, engrave and print advertising signs; incorporators, S. S. Bloch, W. M. Tierman, J. A. Bloch, A. O. Maxwell and W. H. Wilson.

Clarksburg—Hardware, etc.—W. J. Maier & Co., with capital of \$25,000, has been incorporated for dealing in hardware, etc., by W. J. Maier, R. S. Douglass and others.

Fairmont—Bridge.—Fairmont & Clarks-

burg Traction Co. will build a bridge about 400 feet long and 70 feet high. The work will probably be done by contract. H. V. Hesse is chief engineer.

Grafton—Mercantile.—Chartered: Grafton Grocery Co., with capital of \$20,000, by J. A. Crislip of Clarksburg, W. Va.; W. R. Gregg of Grafton and others.

Jane-Lew—Telephone System.—Beeghley Telephone Co. has been incorporated, with capital of \$50,000, by Lloyd Beeghley and R. A. Beeghley of Weston, W. Va.; Charles Beeghley of Jane-Lew and others.

Parsons—Kaolin and Silica Mines.—Mineral Bluff Kaolin & Silica Co. has been incorporated to manufacture and market kaolin and silica, with capital of \$10,000, by C. G. Baugh, Mineral Bluff, Ga.; C. E. Glenn, F. E. Rightmore, M. C. Glenn and others of Parsons.

Parkersburg—Gas and Oil Wells.—East & West Oil & Gas Co. has been incorporated, with capital stock of \$500,000, by E. S. Pope, E. E. Pope, Joel Beckwith, George W. Johnson and others.

Piedmont—Electric-power Plant.—Piedmont Feed & Ice Co. will enlarge and improve its electric-power plant.

Princeton—Telephone System.—Smithfield-Buckrun Telephone Co. has been organized for constructing telephone system by G. W. Adkinson, Charles Adkinson and R. L. Ensminger.

Weston—Mercantile.—Chartered: Weston Grocery Co., with capital of \$100,000, by R. N. Koblegard and others.

Wheeling—Tent and Awning Factory.—Wheeling Tent & Awning Co. will install some new machinery for increasing capacity of its plant.

Wheeling—China Factory.—Warwick China Co. will enlarge by erection of two additional kilns.

INDIAN TERRITORY.

Atoka—Mercantile.—H. W. Robb, W. N. Patterson, R. Y. Morrison, A. J. Cline and others have incorporated the Robb Mercantile Co., with a capital stock of \$30,000.

Vinita—Bottling Works.—Southwestern Bottling Co., operating plants at Wagoner, Muskogee and others points, will establish one at Vinita.

Vinita—Sewerage and Water-works.—Allen, Block & Co. of Minneapolis, Minn., have contract at \$73,455 for construction of the water-works and sewerage systems previously reported. Supply to be from artesian wells.

OKLAHOMA TERRITORY.

Anes—Telephone Company.—Phoenix Telephone Co. has been incorporated by A. Mathis, B. F. Mathis and W. H. Mathis.

Cheyenne—Mercantile.—Chartered: Cheyenne Mercantile Co., with \$10,000 capital stock, by D. H. Cox, J. H. Bryan, J. W. Cooper and others.

El Reno—Oil Wells.—Chartered: Railroad Oil Co., with \$10,000 capital stock, by Otto A. Shuttler, E. E. Blake, J. T. Allison, C. A. Blake and F. E. Riekey.

Erick—Mercantile.—Chartered: Hamilton, Blake & Ward Mercantile Co., with \$20,000 capital stock, by C. F. Hamilton and M. B. Blake of Mangum, O. T.; C. H. Ward of Erick.

Guthrie—Cotton Mill.—It is reported that Alex. T. Hamilton of Rome, Ga., has submitted a proposition to build a cotton mill.

Guthrie—Coal Mining.—Chartered: Wyoming Coal Co., with \$2,000,000 capital stock, by J. Alexander and J. E. Nicholson of San Francisco, Cal., and G. V. Pattison of Guthrie.

Hobart—Grain Company.—Incorporated: The Linzee-Goodwin Grain Co., capitalized at \$20,000, by E. H. Linzee of Hobart, C. W. Goodwin of Clinton, O. T., and C. D. Waring of Greenview, Ill.

Ingersoll—Telephone Company.—Union Telephone Co. has been incorporated, with capital stock of \$10,000, by A. W. Leonard, M. M. Taylor, B. F. Blue, E. Bradley and J. B. McGinness.

Lawton—Mining, etc.—Security Mining & Milling Co., reported incorporated last week with \$1,000,000 capital, has begun prospecting, sinking shaft. W. C. Laughlin, Snyder, O. T., is engineer in charge.

Mulhall—Mining, etc.—Chartered: Fidelity Mining, Oil & Gas Co., with \$200,000 capital stock, by J. C. Elliott, George W. Rotterman, D. McConehey, R. M. Kincaid, O. W. Lobdell, A. T. McMillen and Henry Papen.

Oklahoma City—Gas and Oil Wells.—Chartered: Twin Territory Oil & Gas Co., with \$1,000,000 capital stock, by J. O. Pipher, C. L. Woodward, I. G. Denny, A. L. Simmons and Fred Wehnbauer.

Oklahoma City.—Incorporated: Tonique Company, capitalized at \$5000, by J. M. Owens, Wm. F. Young and S. E. Bowers.

Oklahoma City.—Mining and Smelting.—Incorporated: The Otter Creek Mining & Smelting Co., with capital stock of \$1,500,000, by C. H. Hallett of Vinita, I. T.; J. K. Hayes of Mountain Park, O. T.; J. O. Piper, R. R. Fuller and R. F. Helm of Oklahoma City.

Oklahoma City.—Mercantile.—Incorporated: The Leeper-Graves Company, with capital stock of \$50,000, by J. G. Leeper, J. W. Graves and others.

Oklahoma City.—Candy Factory.—Thomas Schaeffer, 2707 Grape street, St. Joseph, Mo., and associates will establish at Oklahoma City the candy factory referred to last week. They will invest from \$5000 to \$50,000 as trade demands.

Oklahoma City.—Lumber Company.—L. F. Lee, Elizabeth Lee and Frank Levey have incorporated the Standard Lumber Co., with capital stock of \$20,000.

Stillwater.—Mercantile.—Incorporated: Abercrombie, Miller & Co., with capital stock of \$10,000, by W. W. Abercrombie, T. B. Wilson, Mary L. Clark and P. O. Miller.

Waurika.—Gas and Oil Wells.—Waurika Oil & Gas Co. has been incorporated to drill for gas and oil, by C. A. McBrien, E. J. Kelly, W. E. Conner, J. N. Johnston, all of Waurika, Thomas J. Sanford of El Reno, O. T.; James Houston of Edmond, O. T. The capital stock is \$50,000.

BURNED.

Bartow, Fla.—Green Bay Phosphate Co.'s plant; loss \$40,000.

Bedford City, Va.—H. M. Johnson's cannery; estimated loss \$5000.

Birmingham, Ala.—H. Abel's carriage factory; loss about \$10,000.

Ryton, Texas.—J. W. Ellison's cotton gin; loss \$3000.

Chattanooga, Tenn.—Ross-Mehan Foundry Co.'s plant damaged to extent of \$3000.

Chattanooga, Tenn.—The Cliff's Hotel; loss about \$12,000; Willoughby Adams, proprietor.

Frederick, Md.—Cornelius Zimmerman's flour mill; loss reported at \$2700.

Greensboro, N. C.—Dormitory of the State Normal and Industrial College for Women; loss about \$50,000.

Guthrie, O. T.—Dormitory and school buildings composing the government schools for the Pawnee Indians; loss \$40,000; George I. Harvey, superintendent.

Jonesville, Miss.—J. W. Swayze's saw-mill at Black River Station.

Llano, Texas.—Eastern Hotel; estimated loss \$3000.

Louisville, Ky.—Goddard & Co.'s storage warehouse; loss \$30,000.

Marietta, Ga.—Business buildings of J. D. Northcutt and George F. Gohber; estimated loss \$37,000.

Moundville, Ala.—Bates Lumber Co.'s mill destroyed by tornado.

Paducah, Ky.—J. W. Little's spoke factory; reported loss \$5000.

Pine Bluff, Ark.—W. H. Taylor's cotton gin; loss \$1200.

Portsmouth, Va.—American Fertilizing Co.'s plant; estimated loss \$150,000. Address company at Norfolk, Va.

Rolling Fork, Miss.—Brooks Hotel; estimated loss \$25,000.

Texarkana, Texas.—Sproule House; loss \$8000.

Yazoo City, Miss.—W. K. Hyatt & Co.'s building; estimated loss \$50,000.

BUILDING NOTES.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Athens, Ga.—Federal Building.—The government supervising architect has opened proposals for construction of the federal building to be located at Athens. Lowest bid is that of F. O. Brown & Son, Augusta, Ga., at \$64,190.40.

Atlanta, Ga.—Hotel.—Dabney Scoville, proprietor of the Marion Hotel, will build another hotel to cost from \$75,000 to \$100,000; structure to be of brick and steel, five stories high.

Atlanta, Ga.—Office Building.—The Candler Investment Co., previously reported as organized by Asa G. Candler with capital of \$500,000 for erection of office building, has decided to erect a 16-story structure of steel construction, marble and terra-cotta. Work on erection will be commenced shortly.

Atlanta, Ga.—Church.—Coca-Cola Company will erect 16-story office building at corner of Peachtree and Pryor streets.

Austin, Texas.—Warehouse.—Houston & Texas Central Railroad Co. will build warehouse of rock, one story, 138x128 feet; Jeff N. Miller, manager. Houston, Texas.

Baltimore, Md.—Church.—Olive Branch United Evangelical Church will build edifice to cost \$19,000.

Baltimore, Md.—Home Building.—Hebrew Friendly Inn and Aged Home has named February 10 as the date for opening bids on the construction of its building. Cost is estimated at \$24,000.

Birmingham, Ala.—Parsonage.—First M. E. Church has let contract to Fred Morse & Co. at about \$11,000 for erection of parsonage (reported last week) after plans by J. B. Carr & Co. of 15 Watts Building.

Bluefield, W. Va.—Business Building.—L. Kaufman will open bids February 10 for erection of three-story brick business building, plans and specifications for which are on file with S. B. Chandler, 225 Princeton avenue; estimated cost \$8000.

Branchville, S. C.—Church.—Methodist Episcopal Church, South, has had plans prepared and is receiving estimates on erection of brick building. Address Rev. S. A. Nettles, pastor.

Brevard, N. C.—Church.—M. E. Church, South, is erecting \$4000 structure. Address The Pastor.

Chattanooga, Tenn.—Car Barn.—Chattanooga Electric Railway Co. is having plans prepared for erection of addition to car barn.

Claremont, Va.—Store Building.—Claremont Supply Co. will erect two-story store building 24x50 feet.

Columbia, Mo.—Hall.—Missouri University will erect a Y. M. C. A. hall to cost \$80,000; Paul Super, general secretary, Missouri University Association.

Conway, S. C.—Hotel.—Conway & Seacoast Railway Co. will build hotel to cost \$7000 and remodel in this connection another building at a cost of \$5000. H. E. Bonitz of Wilmington, N. C., is the architect.

Dallas, Texas.—Masonic Temple.—Masonic Grand Lodge of Texas will call for bids within thirty days on the erection of the proposed temple, to cost about \$150,000. William James of Fort Worth, Texas, is grand master. J. E. Flanders of Dallas prepared the plans and specifications.

Danville, Va.—Depot.—H. L. Smith of Durham, N. C., has contract for erecting proposed freight depot at Danville for Southern Railway.

De Ridder, La.—School.—George D. Price has contract at \$7000 for erection of proposed school building.

Dublin, Ga.—Library.—H. M. Stanley, secretary, Dublin, Ga., will open bids February 15 for erection under general contract, except steam heating and electric work, of the Dublin Carnegie Library, in accordance with drawings and specifications on file at office of Bruce, Morgan & Dillon, architects, Prudential Building, Atlanta, Ga., and at office of H. M. Stanley. Separate proposals will be received for the steam heating, but not for the electric work. Each proposal must be accompanied by certified check for \$250.

Dublin, Ga.—Office Building.—A. & N. M. Block will erect a three-story office building, with modern equipment.

Durant, I. T.—Church.—M. E. church will erect \$3000 building. Address The Pastor.

Durham, N. C.—Temple.—Hook & Sawyer of Charlotte, N. C., have completed plans and specifications for proposed temple building to be erected at Durham by John Sprunt Hill.

El Dorado, Ark.—School.—School board, Hugh W. Goodwin, secretary, will erect \$15,000 school building, as lately reported. Architect has not as yet been engaged.

Elkins, W. Va.—Hotel Improvement.—Jos. M. Woodford has purchased the Hotel Randolph, and will enlarge and improve same by erection of forty additional rooms.

Frankfort, Ky.—Statehouse.—A bill has been passed by the legislature appropriating \$1,000,000 for the construction of a Statehouse; John C. W. Beckham, governor.

Greenville, S. C.—School.—T. Q. Donaldson, P. T. Hayne and A. G. Gower, building committee, will open bids February 10 for erection of school building, plans and specifications for which are on file at office of P. T. Hayne.

Kansas City, Mo.—Postoffice Building.—John C. Robinson of Chicago, Ill., has received contract at \$311,911 for erection of an addition to the postoffice building at Kansas City, the work to be completed by December 1, 1905.

Kansas City, Mo.—Flat Building.—James T. Broughal, 3215 Main street, will erect three-story 12-apartment flat building, as recently reported; to be of brick, stone and terra-cotta, 116x50 feet, and cost \$40,000.*

Kansas City, Mo.—Warehouse.—Kansas City Bag Manufacturing Co. will build warehouse, three stories, 50x130 feet, with steam-power freight elevator, plate glass, beams, gaslight and water-closet fixtures, etc., to cost \$8000; F. B. Hamilton, architect; office in Beals Building.

Laurel, Miss.—Warehouse.—Foote & Patrick Commission Co. has decided to erect warehouse one story high, 63x120 feet, after modern plans.

Little Rock, Ark.—Warehouse.—Leiper & Mills will construct a two-story brick warehouse to cost \$5000.

Lumberton, N. C.—Bank Building.—Bank of Lumberton, A. W. McLean, president, will erect new building.

Louisville, Ky.—Office Building.—Brinton B. Davis, architect, has completed plans for erection of 12-story steel, brick and terra-cotta office building to be erected in Louisville by Eastern parties at cost of \$700,000.

Manning, S. C.—Building.—S. A. Nettles of Branchville, S. C., will erect two-story brick building to be used for lodge purposes.

Memphis, Tenn.—Office Building.—Tennessee Trust Co., John R. Pepper, president, will appoint committee to arrange for erection of its proposed 15-story office building; probably \$250,000 will be expended.

Meridian, Miss.—Business Building.—Myer-Noville Hardware Co. will erect business building.

Mooresville, N. C.—School.—Mooresville Cotton Mills will build a schoolhouse.

Morristown, Tenn.—Business Building.—G. A. Russell will erect business building two stories high, 40x200 feet.

Nashville, Tenn.—Residence.—Frank Seabright, 816 Russell street, will remodel and rebuild his residence at cost of \$8000.

New Orleans, La.—Theater.—Henry Lehmann and Charles E. Davies estimate that their proposed improvements for remodeling the Bijou Theater will cost about \$40,000.

Newton, Miss.—Warehouse.—Walton Bros. Wholesale Grocery Co. will build two-story brick warehouse.

Norfolk, Va.—Apartment-house.—Williamson Bros. have contract to erect apartment and store building.

Norfolk, Va.—Office Building.—Mutual Assurance Society has awarded contract to J. T. Wilson at about \$600,000 for erection of office building ten stories high, 105x152 feet, to contain 175 offices; structure to be of fire-proof construction.

Oklahoma City, O. T.—Business Block.—Y. F. Freeman of Greenville, Ga., will erect four-story brick business block in Oklahoma City, as recently reported. Architect has not as yet been engaged.*

Oklahoma City, O. T.—Apartment-house.—J. J. Culbertson will build apartment-house three stories high, 100x140 feet, to have electric lighting, steam heat, baths, etc., and cost about \$45,000.

Oxford, N. C.—Seminary Buildings.—Oxford Seminary will rebuild structures destroyed by fire; will erect either buildings to cost from \$20,000 to \$25,000, or one building only to cost that amount. Plans, specifications and estimates are wanted. Address care of Prof. P. F. Holgood.

Paducah, Ky.—Elks Building.—Elks Building Association, recently reported organized, etc., has adopted plans for five-story building 57x109 feet, to cost not more than \$40,000. Address care of G. R. Davis.

Pittsburg, Texas.—Church.—J. E. Flanders of Dallas, Texas, will prepare plans and specifications for M. E. church's \$20,000 edifice reported last week. E. L. Shettles is pastor.*

Portsmouth, Va.—School.—Arnold Eberhard of Norfolk, Va., has prepared plans for erection of \$6000 school building at Scottsville. Address Western Branch District School Board.

Pratt City, Ala.—Jail.—City will rebuild jail recently burned. Address E. J. Hudnall, mayor.

Richmond, Va.—William H. Zimmerman has received plans and specifications from Wright, Blair & Co. of Washington, D. C., for construction of his 125-room hotel, previously reported. Bids will be opened February 6.

Roland Park, Md.—Church.—John Cowan has contract for building the \$15,000 addition to Roland Park Methodist Episcopal Church, recently reported.

Savannah, Ga.—Residence.—W. F. Train has let contract to A. A. Artley for erection of residence.

Selma, Ala.—Library.—Thomas Purvis has received contract at \$8900 for erection of Carnegie Library building.

Starke, Fla.—Church.—Methodist Church will build brick edifice. E. P. Duncan can be addressed.

Staunton, Va.—Depot.—Chesapeake & Ohio Railway Co. will build a depot to cost \$20,000, plans and specifications by T. J. Collins & Son of Staunton having been accepted; J. H. Carlisle, division superintendent, Clifton Forge, Va.

St. Louis, Mo.—Hotel.—American Hotel Co., De Giverville and De Baliviere avenues, will erect hotel, as recently reported; will be 200x400 feet, contain 500 rooms and cost \$100,000. Edward F. Nolte, 620 Chestnut street, is architect in charge.*

St. Louis, Mo.—Depot.—World's Fair plans of the Wabash Railroad at St. Louis, Mo., provide for depot building which will be about 160x170 feet, will have general waiting-room 100x110 feet, baggage, parcels and express rooms and four spaces for classifying passengers, each space being 30x50 feet.

St. Louis, Mo.—Shop Buildings.—St. Louis, Kansas City & Cincinnati Railroad has let contract to John Volk & Co. of Rock Island, Ill., at \$40,000 for erection of roundhouse and machine-shop buildings, lately reported.

Troy, Ala.—Church.—Henderson & Minchener have received contract at about \$22,000 for erection of proposed M. E. church building.

Washington, D. C.—Automobile Garage.—Mutual Automobile Storage Co. will build a garage to cost \$25,000. Plans and specifications are being prepared by B. Stanley Simmons of Washington, D. C.

Wheeling, W. Va.—Office Building.—Giesey & Faris are preparing plans and specifications for Henry Schumacher's proposed office building and storehouse; structure to be seven stories high, 100x130 feet, with vaults, electric and gas fixtures, etc.; cost \$150,000 to \$200,000.

Whitesburg, Ky.—School.—School trustees contemplate erecting a school building to cost \$8000. A. C. Adams is superintendent.

Williamsburg, Va.—Houses.—Williamsburg Knitting Mill Co. will erect block of tenement houses.

RAILROAD CONSTRUCTION.

Railways.

Baltimore, Md.—The R. E. Wood Lumber Co., 609-612 Continental Trust Building, informs the Manufacturers' Record that the Montvale Lumber Co., to be incorporated in South Carolina, will build a narrow-gauge railroad to connect with the Transylvania Railroad, a branch of the Southern Railway, in Transylvania county, North Carolina; rails and equipment engaged.

Beaumont, Texas.—The Buffalo Terminal Railroad Co. is reported incorporated, with \$7,000,000 capital.

Birmingham, Ala.—Reported that the Mac-Afee Company will divide some of its contracts on the Seaboard extension and sublet them in order to hasten the work.

Blacksburg, Va.—Reported that the Virginia Anthracite Coal & Railway Co. will extend its line from Merrimac mines to Blacksburg, four miles. L. S. Randolph is president at Blacksburg.

Chicago, Ill.—The Rock Island system is reported to have purchased 25,000 acres of land adjoining the military reservation in Woodward county, Oklahoma, and that a branch will be built. W. L. Darling is chief engineer.

Chicago, Ill.—Mr. C. A. King, treasurer of the Federal Oil Co. of Kentucky, 739 Stock Exchange, Chicago, writes the Manufacturers' Record that a syndicate with which he is connected has in contemplation the building of a line of railway from Burnside to Monticello, Ky., but the plans are not far enough advanced to give data of value at this time. It is expected to take up the proposition in the near future.

Chicago, Ill.—Reported that John W. Gates, Rookery Building, and associates have completed a deal to convert the Gulf & Interstate Railroad between Galveston and Beaumont, Texas, into an electric railway and connect it with the Beaumont & Sour Lake line and also with the Port Arthur Electric Railway, which is to be built.

Crab Orchard, Va.—Wheeler and A. Johnson are reported to have the contract for grading the Mining Branch Railroad from the Louisville & Nashville line on the North Fork up Straight creek to a point on Gin's creek, about six miles.

Chambersburg, Pa.—The Cumberland Valley Railroad will, it is reported, build a cut-off around Hagerstown, Md. T. J. Breerton is engineer.

Dallas, Texas.—Rumored that the Missouri, Kansas & Texas Railway will build a line between Austin and San Marcos, Texas. J. W. Petheram is chief engineer.

Fairmont, W. Va.—An officer of the Fairmont & Clarksburg Traction Co. writes the Manufacturers' Record about the proposed extension to Belview. It will be about a mile long. A half-mile extension beyond Belview will carry the line to Barnestown, on the Baltimore & Ohio Railroad; L. L. Malone, general manager; H. V. Hesse, chief engineer.

Fort Smith, Ark.—Reported that the Midland Valley Railroad will build an extension from Bokoshe, I. T., northwest twenty-five miles to Briartown, I. T. Kohman & McMurray are reported to have the grading contract. F. A. Molitor is chief engineer.

Gainesville, Texas.—F. E. Lones, representing the Bracey-Howard Construction Co., is reported to have submitted plans to the citizens for building the proposed extension from the Texas & Pacific Railway. The plan involves an issue of \$150,000 in bonds, a cash subscription of \$25,000, a contract with the Texas & Pacific and rights of way between Gainesville and Whitesboro.

Galveston, Texas.—Reported that the Gulf, Colorado & Santa Fe is surveying from Portales, N. M., to Coleman, Texas, for a proposed cut-off about 25 miles long. C. F. W. Felt is chief engineer.

Grafton, W. Va.—The West Virginia Hills Railroad Co. of Grafton has been chartered to build a line from Powell, in Marion county, to Buckhannon, in Upshur county, about thirty miles; capital \$500. The incorporators are W. J. Roderick, P. P. Mills, Robson, W. Va.; J. E. Lough, W. T. Gates, Astor, W. Va.; W. O. Wickoff, Flemington, W. Va.

Greensboro, N. C.—The Greensboro Electric Co. is reported to have under consideration an extension of four miles to Guilford College, the trustees, it is said, offering \$300 per year to secure the line.

Gulfport, Miss.—Reported that the Gulf & Ship Island Railroad has laid twenty miles of track from Mendenhall to Shivers, on the Columbia branch.

Guthrie, O. T.—The St. Louis, El Reno & Western Railroad is reported to have established headquarters in Guthrie. H. A. Gemming is chief engineer. Line to El Reno to be in operation next month, and it is reported that an extension into Texas will begin immediately.

Houston, Texas.—Mr. E. B. Cushing, assistant to the president, New York, Texas & Mexican Railway (Southern Pacific system), writes the Manufacturers' Record that the proposed line recently reported is from Midfield, on the Tres Palacios branch, north to El Campo, on the main line; thence continuing northward intersecting the San Antonio & Aransas Pass Railway at or near Altair, and thence to Glidden, on the main line of the Gulf, Harrisburg & San Antonio (Southern Pacific system). It will probably be sixty-five miles long. Construction is not authorized, and the survey is being made to learn the probable cost, etc.

Indianapolis, Ind.—The Piedmont Construction Co. has been incorporated, with \$75,000 capital, by Joseph Little, James B. Wilson and George G. Coughlin to promote and finance the construction of interurban electric railways and to deal in stocks. These are the gentlemen interested in the proposed electric railway from Greenville to Anderson, S. C.

Kansas City, Mo.—The bill introduced in Congress by Representative J. T. Robinson for a railroad up Hot Springs mountain, on the government reservation, provides, it is reported, that the franchise shall be granted to F. G. Lotterer of Kansas City, and also that the line will be double-tracked. George W. Baxter, who secured a franchise ten years ago for a similar project on West mountain at Hot Springs, is said to be in Washington trying to have the franchise extended.

Lake Providence, La.—A mass meeting has adopted resolutions favoring a bond issue to build a branch of the Memphis, Helena & Louisiana Railroad from Lake Providence to Mer Rouge, thirty-six miles.

Lahigh, I. T.—The construction of a spur about a mile and a-half long has begun. It will reach the new shaft of the Atoka Coal & Mining Co.

Lufkin, Texas.—Mr. P. A. McCarthy, C. E., of Lufkin, informs the Manufacturers' Record that he has investigated the topography of the country and resources of tributary territory for a projected railroad, which, it is said, will run from Sabine Lake via Beaumont, Texas, and thence through the central and northwestern parts of the State, with headquarters probably at Waco.

McKinney, Texas.—J. L. Greer of McKinney and W. W. Yates of Leonard are reported interested in a plan to build an electric railway connecting McKinney and Bonham.

Mexico, Mexico.—The Oaxaca & Ejutla Railroad is reported completed for thirty-seven miles from Oaxaca, and is being graded from the end of track to Ejutla, seven miles. M. Calderon of Mexico is secretary.

Meridian, Texas.—A movement is under way to secure the building of a railroad northwest from Waco via Meridian and Stephenville to the Thurber coal fields, about 100 miles. N. R. Morgan is secretary of the Citizens' Club.

Mobile, Ala.—The Mobile, Jackson & Kansas City Railroad is reported to have completed tracklaying as far as Bay Springs, Miss., with grade finished twenty-seven miles farther north to Newton. Grade is nearly completed to Decatur, ten miles north of Newton.

Mobile, Ala.—The Mobile, Jackson & Kansas City Railroad will, it is reported, build an extension into Meridian, Miss. W. W. Hayden is chief engineer.

Monterey, Mexico.—S. M. Robertson is reported to have closed a contract with the National Railroad of Mexico to lay the track on its branch from Monterey to San Miguel, about seventy-five miles. Tracklaying is reported begun at Laredo, Texas. This line will connect at San Miguel for Matamoros.

Morelia, Mexico.—The United States Packing Co. of Morelia is reported to have a concession for a line from Uruapan to Los Reyes, about fifty miles. J. W. De Kay is said to be interested.

Moultrie, Ga.—Reported that the Georgia Northern Railway will build an extension to Boston, Ga., seven miles. C. W. Pldcock is vice-president and general manager.

Nacogdoches, Texas.—Reported that contracts will be let immediately for grading on the proposed Nacogdoches & Southeastern Railway, which is to run from Nacogdoches to the Angelina river, thirty miles. W. H. Kimball is chief engineer.

Nashville, Tenn.—Reported that a branch will be built from Crossville, Tenn., on the Tennessee Central Railroad, eighteen miles to the Laurel Creek coal fields. W. N. McDonald is chief engineer of the Tennessee Central.

Newport News, Va.—H. P. Barney, superintendent of the Newport News, Old Point & Electric Co., is reported to have secured rights of way for an electric railway connecting Hampton with Yorktown and Gloucester Point.

Norfolk, Va.—Reported that a deal has been practically closed by the Norfolk & Southern Railroad for the purchase of the Washington & Plymouth Railroad of North Carolina, and that the line will be extended from Plymouth to Mackey's Ferry, eight miles. F. L. Nicholson is engineer maintenance of way.

Norfolk, Va.—The court has signed an order allowing the Bay Shore Electric Railway to issue \$150,000 of receivers' certificates to make improvements.

Norfolk, Neb.—President H. Leone Miller of the Winnipeg, Yankton & Gulf Railway Co. writes the Manufacturers' Record that the company is ready to begin construction and is trying to secure contractors who can take part or all of the work and complete it ready for operation excepting the steel bridges, contract for which is let.

Perkins, O. T.—Mr. T. J. O'Donnell writes the Manufacturers' Record concerning the O'Donnell Construction Co., saying that it is chartered to grade a railroad from Kansas City, Mo., to Duluth, Minn., with branches. Expect to begin work by April 1.

Pine Bluff, Ark.—Secretary E. D. Russell of the Commercial League writes the Manufacturers' Record that a company is forming to build a railroad from Pine Bluff to Hazen, Ark., on the Choctaw, Oklahoma & Gulf Railroad (Rock Island system). It will be about forty miles long. Mr. Russell may be addressed.

Port Norfolk, Va.—Mr. Geo. S. Shaffer, superintendent Norfolk & Portsmouth Belt Line Railroad, writes the Manufacturers' Record that the talk about improvements at Pinners Point is largely due to newspaper reports, but he says that the company does propose during the year to build about one mile of sidings.

Raleigh, N. C.—The Raleigh & Pamlico Sound Railroad is reported to have begun construction immediately beyond the Neuse river, nine miles from Raleigh, with J. W. Bradshaw in charge of the work.

Richmond, Va.—Reported that the Chesapeake & Ohio Railway will double-track its line from Richmond to Newport News, seventy-six miles. F. I. Cabell is engineer of construction.

Roanoke, Va.—Reported that the Norfolk & Western Railway may build a branch from Naugatuck, W. Va., along Pigeon creek through Logan county. C. S. Churchill is chief engineer.

Russellville, Ky.—J. R. Reynolds of Russellville is reported to be securing for the Southern Kentucky Interurban Traction & Power Co. rights of way from Russellville via Middleton and Sulphur Springs to Franklin, Ky., twenty miles.

Sneedville, Tenn.—L. M. Jarvis is reported to be interested in a plan to build a railroad from Lone Mountain, Tenn., to St. Paul, Va., about seventy-five miles, location of surveys being in progress.

St. Louis, Mo.—Reported that the Missouri, Kansas & Texas Railway will double-track its line from Atoka, I. T., to Denison, Texas. S. B. Fisher is chief engineer.

St. Louis, Mo.—Reported that the St. Louis & San Francisco Railroad will build a branch twenty-three miles long between Aberdeen and Columbus, Miss.; J. F. Hinckley, engineer of construction, 500 Fullerton Building, St. Louis, Mo.

St. Louis, Mo.—Mr. W. S. Newhall, chief engineer of the Wabash Railroad, sends the Manufacturers' Record blueprints of the proposed World's Fair transportation facilities. These provide for additional tracks (making five tracks in all) between Union avenue and Forsythe Junction, a distance of about 3000 feet. There will also be nine special and private car storage tracks and two tracks for shuttle trains. Contracts for most of this work have been let.

Temple, Texas.—The Temple & Belton Interurban Electric Railway Co. has been organized to build the proposed electric railway to connect the two towns. The officers are Samuel Watts, president; A. F. Bentley, vice-president; A. C. Mayers, second vice-president; W. H. Taylor, third vice-president; Calvin Greene, treasurer; J. C. Houser, secretary. It is stated that financial arrangements have been made to build the line.

Thurmond, W. Va.—The Kanawha, Glen Jean & Eastern Railroad will, it is reported, build an extension from Thurmond to Kilsyth, eleven miles. Thomas Nichol is chief engineer.

Wagoner, I. T.—C. N. Haskell will, it is reported, build a railroad from Correta to Joplin, Mo., via Wagoner. Another report says he will extend the Muskogee Union Railroad from Falls City via Correta.

Washington, D. C.—Grading has begun on the proposed Great Falls & Old Dominion Railway. W. J. Oliver is the contractor.

Winifrede, W. Va.—The Winifrede Railroad is reported to have built three and one-half miles of line from Winifrede to Coopersville. R. B. Cassidy is superintendent, and Frank B. Stewart, secretary.

Wrightsville, Ga.—Mr. A. F. Daley, president Wrightsville & Tennille Railroad, writes the Manufacturers' Record that no action has been taken by the management to justify the press reports of a proposed extension from Hawkinsville to Perry. He has no other information about any such work.

Street Railways.

Anniston, Ala.—O'Brien Bros. are reported to have begun grading for the new electric railway of the Anniston Electric & Gas Co. from Brock's Switch, at Oxford, to a proposed park near Hobson City, about one mile.

Joplin, Mo.—President A. H. Rogers of the Southwest Missouri Electric Railway Co. writes the Manufacturers' Record that the company has purchased the interests of the projected Mineral Cities Railway within and near the city of Joplin. This will only involve the building by the company of a local road about two miles long in Joplin. All construction material is already on hand.

South McAlester, I. T.—Reported that the Indian Territory Traction Co. will build an extension to a proposed park.

Industrial Railway Equipment.

Railway equipment for use in and around industrial plants is in greater demand every day as managers find the great advantage in its being installed. Engineering companies making a specialty of industrial railway equipment are on the alert to supply the demand and to assist by counsel in deciding these managers who are investigating with a view to purchase. The Woonham Mager Engineering Works of Passaic, N. J., sales offices at 29 Broadway, New York, is a specialist in industrial railway equipment, and has issued a pamphlet illustrating its offering in industrial steel cars, portable track, cars specially designed for various uses, etc.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Air Condenser.—See "Drilling Equipment." Belting.—G. W. Stiwwinter, Scroll, N. C., wants belting.

Boiler.—See "Heating Plant."

Boiler.—See "Woodworking Machinery."

Boiler.—See "Pumping Outfits."

Box Supplies.—East Coast Lumber & Supply Co., Eas Gallie, Fla., wants to correspond with manufacturers of birch hoops or straps for orange boxes.

Brick Chimney.—Mordecai T. Endicott, chief of bureau of yards and docks, Navy Department, Washington, D. C., will open bids February 20 for circular brick chimney 200 feet high at navy-yard, Washington. Plans and specifications can be seen at navy-yard, or will be furnished by the bureau.

Brick Machinery.—Frank P. Helfner, Atlanta, Ga., wants to buy brick machinery, engine, 60-horse-power boiler, etc., for complete plant of 40,000 daily capacity.

Building Material.—Manor Trading Co., Manor, Ga., wants roofing, paints, etc.

Building Materials.—James T. Broughal, 3215 Main street, Kansas City, Mo., wants estimates on elevator, combination gas and electric fixtures, material for fourteen bath-rooms, tiling, wainscoting, plumbing, heating apparatus (steam), plate glass, laundry equipment and dryers.

Building Materials.—R. M. Richardson, Seneca, S. C., will want cast-iron columns, sills, I beams, brackets, plate glass, doors, sash, hardware, lime, cement, sanitary equipment, etc., for \$20,000 hotel.

Building Materials, etc.—M. E. church, E. L. Shettles, pastor, Pittsburg, Texas, will want roofing, hot-air heating plant, glass, furniture, etc.

Building Materials.—W. T. Jayne, Gate City, Va., wants roofing, siding and shuffling.

Clayworking Machinery.—See "Brick Machinery."

Contractors' Outfits.—Walter A. Zelnicker Supply Co., 408 N. Fourth street, St. Louis, Mo., is in market for second-hand contractors' outfits, wheel scrapers and slips, dinky engines, steam shovels and light rail.

Corn Mill.—G. W. Stiwwinter, Scroll, N. C., wants mill to grind six to ten bushels of corn hourly.

Cresosoting Companies.—Standard Pole & Tie Co., 133 Front street, New York, wants to correspond with creosoting companies in the South prepared to creosote promptly an order for yellow-pine ties.

Drilling Equipment.—Savage Mountain Fire-Brick Works, Frostburg, Md., will open and develop 900-foot tunnel, and wants estimates on steam-drilling apparatus, air condenser and appliances.

Drying Equipment.—John M. Metz, Lincoln, N. C., is in the market for second-hand apparatus to dry lumber; hot-air process preferred.

Egg Cases.—See "Packages."

Electrical Equipment.—See "Engines, etc."

Electrical Equipment.—See "Building Materials."

Electrical Equipment.—Danville Ice & Coal Co., Danville, Ky., wants another direct-connected or belted 20 to 40-kilowatt dynamo, second-hand, for an exciter outfit; prefer 125-volt.

Electrical Machinery.—W. A. & J. G. Blount, Washington, N. C., want to buy motor (water or electric) for use about soda fountain; may consider lighting equipment in same connection.

Electrical Machinery.—See "Woodworking Machinery."

Electrical Machinery.—Z. V. Sherrill, Marion, Va., wants prices on one to two-kilowatt dynamo, second-hand and new.

Electric-light Plant.—W. A. Dole, chairman of the light committee, Columbia, S. C., wants bids from parties to furnish complete

electric-light plant for lighting the city; present plant furnishes sixty arc and 2000 incandescent lights.

Electric-light Plant.—Frank F. Taylor, Kemps Creek, Ala., will want prices on electric-light plant in about sixty days.

Electric-light Plant.—American Hotel Co., De Oliverville and De Ballviere avenues, St. Louis, Mo., wants bids on electric-light plant, 100-kilowatt, and laundry plant.

Electric-light Plant.—T. W. Harbin, Calhoun, Ga., wants estimates on electric-light plant of 500 incandescent and twelve arc lights; complete equipment needed except boiler.

Electric Machinery.—McConnell Belt & Leather Co., Athens, Ga., wants 50-horse-power electric motor, 10-horse-power electric motor, pulleys, shafting, 10-horse-power boiler for heating, etc.

Elevator.—See "Building Materials."

Elevators.—Z. J. Carter & Son, Wallace, N. C., wants addresses of manufacturers of hand-power elevators, capacity 1000 pounds.

Engine.—O. C. Sprinkle, Marion, Va., is in the market for 5 to 10-horse-power gasoline engine, second-hand.

Engine.—See "Woodworking Machinery."

Engine.—See "Pumping Outfits."

Engine.—Z. V. Sherrill, Marion, Va., wants to buy second-hand gasoline engine, three and one-half to four horse-power.

Engine.—A. V. Kaiser & Co., 222 South Third street, Philadelphia, Pa., wants second-hand Corliss engine, heavy type, cylinder about 30x48-inch, balance wheel about 60,000 pounds, with a 12-foot band wheel, shaft 14 inches diameter.

Engine and Boiler.—Manor Trading Co., Manor, Ga., wants 100-horse-power boiler and 30-horse-power engine.

Engine and Boiler.—Frank P. Helfner, Atlanta, Ga., wants to buy 60-horse-power boiler and engine. See "Brick Machinery."

Engines.—See "Contractors' Outfits."

Engines.—Z. V. Sherrill, Marion, Va., wants prices on two and one-half-horse-power gasoline engines, second-hand and new; also on one to two-kilowatt dynamo, second-hand or new.

Engines and Boilers.—See "Woodworking Machinery."

Engines, etc.—Ballinger Light & Ice Co., Ballinger, Texas, wants bids on engines, pumps, shafting, belts, ice machinery and fan material.

Fire-clay Brick.—John W. Piver, Fargo, Ga., wants to communicate with manufacturers of fire-clay brick for coke or charcoal ovens.

Fire-department Equipment.—Wanted.—Information as to hook-and-ladder trucks, hand-power fire pumps, hose, etc. Address Hal L. Buck, Intendant, Conway, S. C.

Flour-mill Machinery.—Alleghany Milling Co., Covington, Va., will need supplies and machinery for 100-barrel flour and feed mill.

Foundry Equipment.—Scott Foundry Co., Keokuk, Iowa, wants one two-and-one-half-ton worm-gear crane ladle, second-hand.

Furniture.—Z. J. Carter & Son, Wallace, N. C., want to correspond with manufacturers of medium priced furniture.

Gas Plant.—Bids will be opened February 24 for installing acetylene-gas plant, etc., at new military post at Chickamauga Park, Ga. Information furnished upon application to H. W. French, captain, Q. M., U. S. A., Chattanooga, Tenn.

Handle Machinery.—W. D. Moren & Co., Cooper, Texas, are in the market for machinery for manufacturing handles.

Hay Press.—See "Press."

Heating Apparatus.—See "Building Materials."

Heating Apparatus.—Y. F. Freeman, Greenville, Ga., wants steam-heating apparatus for four-story building.

Heating Plant.—McConnell Belt & Leather Co., Athens, Ga., wants 10-horse-power boiler for heating.

House-moving Equipment.—Joseph Pritchard, Box 145, Elizabeth City, N. C., wants catalogues of house-moving apparatus.

Ice Machinery.—Henry A. Beattie, Starkville, Miss., wants names and addresses of manufacturers of ice machinery.

Ice Machinery.—See "Engines, etc."

Ironworking Machinery.—See "Woodworking Machinery."

Ironworking Machinery.—Hilton-Collins Company, Louisville, Ky., wants prices on ironworking machinery.

Laundry.—See "Electric-light Plant."

Laundry Equipment.—See "Building Materials."

Lighting Plant.—Nicholson Hotel, Chester, S. C., wants to correspond with makers of gasoline-gas equipments with a view to installing 100-lamp outfit for hotel.

Mattress Machinery.—W. B. Lasley, China Grove, N. C., wants machinery for manufacturing mattresses.

Mill Supplies.—See "Engines, etc."

Office Supplies.—See "Postoffice Outfit."

Packages.—Rawlings & Mangus, Vesuvius, Va., want addresses of manufacturers of egg-case fillers.

Photographs.—See "Typewriters."

Pipe.—Kahmann & McMurry, Kansas City, Mo., want 600 feet 48-inch wrought-iron pipe.

Piping.—Manor Trading Co., Manor, Ga., wants a quantity of copper piping, iron piping, couplings, etc.

Plumbing, etc.—Lee Crouch, clerk county court, Elkins, W. Va., will open bids February 9 for plumbing, heating, wiring and gas-piping for new courthouse at Elkins, in accordance with plans and specifications on file in clerk's office. Plans and specifications may also be seen at office of J. Charles Fulton, Uniontown, Pa.

Plumbing Supplies.—Bessemer Plumbing Co., Bessemer, Ala., wants competitive prices from manufacturers of plumbing supplies.

Poles.—E. B. Tyler, Hopkinsville, Ky., is in market for 130 25-foot poles, half six-inch and seven-inch top; 130 30-foot poles, seven-inch top; 150 35-foot poles, seven-inch top; 100 40-foot poles, seven-inch top; 150 45-foot poles, seven-inch top; 30 50-foot poles, seven-inch top; either cedar or chestnut, all f. o. b. cars Hopkinsville.

Postoffice Outfit.—Bank of Collins, Collins, Miss., wants to buy complete outfit for third-class postoffice.

Press.—John A. Trollinger, Haw River, N. C., wants to buy steam or horse-power hay press.

Pulleys, Shafting, etc.—See "Electric Machinery."

Pumping Outfits.—Orange County Irrigation Co., Beaumont, Texas, W. A. Ward, secretary, wants estimates on two complete economical pumping outfits, each with capacity of 30,000 gallons per minute, one with lift of sixteen feet and the other eight feet; also second-hand boiler and engine with capacity of thirty to fifty horse-power.

Pumps.—See "Engines, etc."

Railway Equipment.—See "Contractors' Outfits."

Railway Equipment.—H. M. Lipe, Matthews, N. C., wants second-hand traction engine, ten or fifteen horse-power.

Railway Equipment.—Powhatan Lime Co., Strasburg, Va., is in want of enough 20-pound T rail to lay 600 feet of track; that would be one length of rail 1200 feet long; can use good second-hand material.

Railway Equipment.—Harper Machinery Co., Park Row Building, New York, is in the market for five-ton 36-inch-gauge locomotive for prompt shipment.

Road Machinery.—George Strempel, Apartado 56, Aguascalientes, Mexico, wants to buy roller for street building to weigh about 30,000 pounds; wants to buy direct from manufacturers.

Rolling-mill Machinery.—Birmingham Paint & Roofing Co., Birmingham, Ala., wants to purchase a set of rolls four feet or longer suitable for rolling No. 12 iron; new or second-hand.

Saw-mill.—Wade Pittman, Newbern, Tenn., wants prices on saw-mill with daily capacity of from 10,000 to 15,000 feet of lumber per day, with gang edger and without gang edger; wants prices on each separately.

Saw-mill.—G. W. Stiwinter, Scroll, N. C., wants equipment for saw-mill, also for shingle mill.

Shafting.—W. T. Jayne, Gate City, Va., wants shafting.

Single-tree-factory Equipment.—See "Woodworking Machinery."

Soap-factory Machinery.—E. D. Coleman, Aberdeen, Miss., wants information on the manufacture of soap and estimates on cost of machinery.

Steel Standpipe.—Bids will be opened February 10 for erection of steel standpipe in accordance with plans and specifications on file. For complete details address board of awards, Robert M. McLane, president, Baltimore, Md.

Stump Puller.—John W. Piver, Fargo, Ga., wants to correspond with manufacturers of stump pullers.

Tank.—Thos. Cruse, quartermaster, U. S. A., Jefferson Barracks, St. Louis, Mo., will open bids February 18 for construction of 150,000-gallon steel tank and trestle. Plans,

specifications and blank proposal forms furnished on application.

Tanks.—John W. Piver, Fargo, Ga., wants to correspond with manufacturers of tanks for condensers.

Terra-cotta Machinery.—Swift Bros., Beverly, Ga., want to purchase machinery for making terra-cotta, size twelve to thirty inches in diameter.

Toothpick Machinery.—Lang & Carter, Bemidji, Minn., want addresses of makers of machinery for manufacturing toothpicks.

Traction Engine.—See "Railway Equipment."

Turpentine Distillery.—Fant Bros., Anderson, S. C., want information regarding the distillation of crude turpentine from planing-mill shavings from pine lumber of average resin.

Typewriters.—Knoxville Typewriter & Phonograph Co., Knoxville, Tenn., wants prices on typewriters and supplies and phonographs.

Wagon-factory Equipment.—Ayden Milling & Manufacturing Co., Ayden, N. C., wants to correspond with makers of machinery and supplies for manufacturing buggies and wagons.

Wagon-factory Equipment.—See "Woodworking Machinery."

Wagon-factory Machinery.—Secretary of Commercial League, E. D. Russell, Pine Bluff, Ark., wants information relative to wagon manufacturing, cost of machinery, etc.

Water Motor.—See "Electrical Machinery."

Water-works.—Correspondence is invited regarding the construction of water-works at Smithland, Ky. Address The Mayor.

Water-works.—Frank F. Taylor, Kemps Creek, Ala., will want prices on water-works equipment in about sixty days.

Water-works Improvements.—City Board of Public Works, Kansas City, Mo., will open bids February 15 for construction of about 12,000 feet of 48-inch steel force main, laid; cost to be about \$150,000. Bids on different parts of the work will be opened. A bond of \$75,000 required of successful bidder.

Well-drilling.—John Lindsey, Laurel, Miss., wants to correspond with parties relative to installing machinery for drilling oil wells.

Woodworking Machinery.—See "Toothpick Machinery."

Woodworking Machinery.—See "Handle Machinery."

Woodworking Machinery.—Hilton-Collins Company, Louisville, Ky., wants prices on singletree machinery, also on boilers, engines, electrical equipment, building materials, mill supplies, ironworking and bending machinery, etc.

Woodworking Machinery.—Kershaw Manufacturing Co., Chase City, Va., wants handle, lath, stove and heading saws, boiler and engine.

Woodworking Machinery.—Kennedy & Morelock Stave Co., Wm. M. Kennedy, president, Memphis, Tenn., is in market for direct-acting steam drag-saw.

Woodworking Machinery.—B. G. Rhodes & Co., Dublin, Ga., want catalogues and prices on band saw, mortiser, chain mortiser preferred, double-end equalized to cut from twelve inches to eight feet, automatic hubbing machine, automatic knife grinder, proportional knife-balancing machine and machinery for making axles, wheels, bolts, clips, band iron, etc.; want prices on carload lots.

TRADE LITERATURE.

For Draughting Rooms.

Men who work in draughting rooms should write the D'Olier Engineering Co. for mailing card illustrative of the D'Olier adjustable electric-lamp fixture. Address the Philadelphia office at 119 S. Eleventh street.

Jeffrey Grab Bucket.

Circular No. 77 of the Jeffrey Manufacturing Co. tells about the Jeffrey grab bucket manufactured at the company's works in Columbus, Ohio. It presents illustrations and brief reference to the various uses of these buckets for handling coal, limestone, gravel, sand and other materials.

A Modern Fire Fighter.

The attention of insurance companies, engineers, water-works superintendents, fire-department chiefs and others is called to the Ludlow Valve Manufacturing Co.'s latest production. This is a fire hydrant embodying new features that will at once meet with the approval of users. A leaflet describes and illustrates the new hydrant; offices at Troy, N. Y.

For the Foundry Business.

A valuable publication is the Obermayer Bulletin, issued monthly in the interest of the foundry business. It contains timely data and information regarding the foundry and about the various supplies needed in such a plant. The S. Obermayer Company of Cincinnati, Ohio, etc., manufacturer and dealer in foundry supplies, can furnish copies of the booklet.

Yoking Our Interests.

A folder entitled "Yoking Our Interests" is being mailed to the electrical trade and buyers of electrical apparatus. It presents some data of an instructive nature regarding the way of selecting electrical purchases from one of the largest stocks in this country and how to obtain the promptest shipments. The Ewing-Merkle Electric Co. of St. Louis, Mo., is distributing the folder.

A Great Light Reflector.

A mailing card is being calling attention to the fact that Magnite cold water paint was used with fine effect on the large buildings of the American Axe & Tool Co. at Glassport, Pa. Magnite is a great light reflector. It does not flake off, gives a remarkably firm, hard surface, and does not discolor with age. Its manufacturers are Messrs. J. A. & W. Bird & Co., Boston, Mass.

The Arrow.

"Rufus, the Roofer," makes some pointed remarks in the January number of The Arrow. In his correct talk on roofing tin he touches on the manufacture of "Taylor Old Style" tin and relates several humorous anecdotes. This is the tin which the N. & G. Taylor Co. of Philadelphia, Pa., has been manufacturing for seventy-four years. New Year's Day was the company's ninety-fourth anniversary. Write for the booklet.

The Horse Fair.

The calendar for 1904 being presented to the friends of Messrs. G. M. Davis & Son is one of the most pleasing in appearance that has been issued. It shows a colored reproduction of Rosa Bonheur's celebrated painting, "The Horse Fair." The little bit of advertising on the picture does not detract from the beauty of the lithograph. Messrs. Davis & Son are the well-known cypress-tank manufacturers of Palatka, Fla.

Ingersoll-Sergeant Calendar.

The pneumatic-tool department of the Ingersoll-Sergeant Drill Co. of New York, offices at 25 Cortlandt street, has issued a novel and artistic calendar for 1904. It pictures a workman operating one of the company's Haeseler pneumatic hammers on a "skyscraper," while the axial valve, an important feature of the hammer, appears in a novel way. This calendar is handsomely printed, and is an adornment to the offices of all interested in pneumatic tools.

A New Packing.

Engineers and others interested in packing are invited to send for a book entitled "The Engineer" and a sufficient supply of Black Squadron Ring Packing to test. This packing is a new departure on the four-wedge, self-setting adjustable principle. It will save a lot of bother, and incidentally keep things running smoothly in the engine-room or wherever it is used. Address the manufacturer, Canos Manufacturing Co., 142 N. Second street, Philadelphia, Pa.

The Pride of Dixie.

A pleasing calendar for 1904 is that sent out from the "home of the press that Scott builds." It presents a photographic reproduction of a Southern darkey boy just finishing a large slice of watermelon, stopping just long enough to state that "dey ain't goin' be none left." The Scott Manufacturing Co. of Keokuk, Iowa, is distributing the calendar to keep people in mind of the fact that it builds the Andrus Brick Press, one of the most popular machines of its character on the market.

Justice.

In a painting entitled "Justice" which was ordered by the Audit Company of 43 Cedar street, New York for calendar purposes, the artist has treated the subject in a decorative manner and has endeavored to give to his effort a befitting dignity and beauty. For the conventional blindfolded figure is substituted a "Justice" who with open eyes places in one balance the scroll of evidence and in the other the weight of just opinion. "Justice" is supported by the figures "Wisdom" and "Power," who conform and uphold her equitable decisions. The Audit Company audits and appraises properties, makes investigations for bankers, corporations, etc.

To Guard Against Fire.

The December issue of the United States Sprinkler Bulletin is now ready. This publication is devoted to explaining how the use of certain mechanical equipments for fire protection can confine damage to a limited area and minimum amount. The equipments are comprised in the Grinnell System of Automatic Sprinklers, installed in all parts of the world by the General Fire Extinguisher Co. of Providence, R. I. Manufacturers who want to protect their plants should read the bulletin regularly. It contains many facts of value for their consideration.

New and Old New York.

An engraving representing new and old New York shows 250 years of progress in the great metropolis. It presents a scene on the water front 250 years ago and today, the contrast being very striking. A few explanatory sentences are printed in English, German and French. The picture is issued with the compliments of the Robins Conveying Belt Co., manufacturer of conveying machinery, mine and smelter equipment, electric locomotives, etc., offices in Park Row Building, New York city. This building is shown on the picture as the highest in the world.

The Frisco System Calendar.

In issuing its calendar for 1904 the Frisco system has selected most appropriate and timely picture designs. These are four in number, representing scenes suggested by the coming Louisiana Purchase Exposition. "De Soto at the Mississippi—1541;" "Founding of St. Louis—1764;" "Transfer of Northern Louisiana—1804;" and "Marquette's Voyage of Discovery—1673," are the titles. On the reverse of the four quarter pads of the calendar are presented interesting facts concerning the exposition, the city of St. Louis and the Frisco's facilities for people who intend to visit the exposition.

A Compound Engine Test.

Every man interested in the steam engine and its efficiency should read the booklet entitled "A Compound Engine Test." This publication presents the results of tests made at Sibley College, Cornell University, to determine the water consumption, mechanical efficiency, speed regulation and running qualities of an engine. The engine used was built by the Buffalo Forge Co. of Buffalo, N. Y. Such exceptionally good results were secured that a detailed description of the test has been printed for the benefit of engineers and others desirous of becoming acquainted with valuable facts in this direction. Send for the booklet.

Gas for Furnace Work.

Many manufacturers have adopted the Loomis-Pettibone system for the manufacture of gas. Bituminous or anthracite coal, coke or wood can be burned without modification in the apparatus, changes from one to another being made as occasion requires without interruption of the work. With this gas applied to direct-fired furnaces any desired temperature that may be required for annealing, forging, welding and melting can be obtained. To illustrate the saving possible by the use of gas instead of oil, there has been issued a pamphlet which the Power & Mining Machinery Co. desires to send to interested parties. Offices at 52 William street, New York.

The Southern Saw.

Many saw-mills, woodworking plants and other factories of a similar character are depending on the Southern-made saw and obtaining the highest satisfaction from its use. A new catalogue describing and illustrating the Southern Saw is being issued by the manufacturer, Southern Saw Works, Atlanta, Ga. This company manufactures solid and inserted chisel-bit circular saws from best crucible steel; also shingle saws, collars, saw mandrels, bits and shanks for nearly all makes of chisel-bit saws, etc. It also repairs all kinds and makes of saws, burnt saws being remodeled so as to be equal to new ones. The interesting catalogue can be obtained on application.

Electrical and Steam Machinery.

Equipments of machinery for electrical and steam purposes is held in large stocks and of the best-known manufacturers by Messrs. Rossiter, MacGovern & Co., 17 Battery Place, New York. This incorporated company issues a booklet listing the various engines, generators, motors, dynamos, railway motors and cars, etc., now ready for prompt shipment. Purchasers of equipment of the class referred to will find it advantageous to examine the lists and prices when about to place contracts. The company also acts as engineers and contractors, having branch offices at 84 State street, Boston, and

in Missouri Trust Building, St. Louis; also factories at Jersey City and St. Louis.

The American Lathes.

The recent introduction of high-speed steel has revolutionized machine-shop practice to such an extent that only the most advanced machines are capable of handling them to advantage. Such machines are found in the improved metal-working equipment manufactured by the American Tool Works Co. of Cincinnati, Ohio. This company is issuing a booklet which illustrates and briefly describes the American engine lathes which the company is selling to many important users, including the United States government, foreign governments and the leading railroads throughout the world. These tools are strongly proportioned, smooth running, quick to operate and easy to handle.

Rotary Planers.

Catalogue No. 37 of the Newton Machine Tool Works of Philadelphia, Pa., describes and illustrates the company's rotary planing machines. These machines are built in eleven sizes, with heads from 14 to 84 inches in diameter over tools either fixed, portable or on a round base, and either belt or motor driven. The sizes under 48 inches are spindle driven and those of 48 inches or over are driven with an internal gear on cutterhead, and are fed by a rack and spiral pinion. This method of traversing the saddle is said to give a steady, even motion, and is very efficient where the saddle has a long travel on bed. Further specifications regarding these successful machines can be obtained from catalogue.

Asbestos Theater Curtains.

In view of the general active interest being taken at this time in protection against fires in theaters, the issuance of the leaflet "Asbestos Theater Curtains" is most timely. This presents facts regarding the superior features of the asbestos curtain manufactured by the H. W. Johns-Manville Company of 100 William street, New York. The curtains are of pure asbestos, so that they cannot burn, and the style into which is woven strands of brass wire has sufficient tensile strength to withstand the wind blasts common to theater fires. One of the company's curtains was recently tested at the Majestic Theater in New York. It resisted successfully 1000 degrees Fah. applied with a gasoline torch.

Alpha Canvas Belting.

There is now being manufactured a belting which is claimed to withstand the strain of 1400 pounds to each inch in width of four-ply. This strength is obtained from the quantity and quality of canvas, nothing but the longest-fibered cotton being used. Alpha cotton is tightly twisted and woven under tension to give great strength and little stretch. The stretching process begins with the raw cotton while being twisted into the yarn, this yarn being woven into canvas under tension, and the folding of the canvas into the belt is done under tension by a machine made and used only by the manufacturers of Alpha belting. For booklet of details address the American Belting Co., Youngstown, Ohio.

Lee Injector Manufacturing Co.

Those who deal in or use engineering specialties of any kind will find their knowledge of improved attachments and supplies in that class incomplete without a knowledge of the products of the Lee Injector Manufacturing Co. of Port Huron, Mich. This company's Lee Restarting Injector has become known for its merits, as have also the ball check valves, globe and angle valves, purger attachments, ejectors, cellar drainers, water gauges and other kindred devices. The company is issuing an illustrated catalogue giving all the necessary details about its manufactures and showing what they can accomplish when in actual use. Sizes, styles, capacities, prices and the other data desired by those interested will be found in most convenient form.

New Era Gas Engines.

Thousands of power-users are conversant with the advantages of gas engines by actual usage. Others are daily becoming more appreciative of the gas engine as a prime mover, and manufacturers and their plants busily engaged in building such engines. The New Era Gas Engine can be operated, using as a fuel natural gas, acetylene gas, gasoline gas, gasoline, kerosene or distillate. It is built by the New Era Gas Engine Co. of Dayton, Ohio. This company now has ready for distribution its latest catalogue, giving detailed descriptions, accompanied by illustrations of the New Era. For more than twelve years this engine has been on the market, and the demand increases steadily.

It is well worth the investigation of possible buyers.

Concerning Sand-Lime Bricks.

For several years past great interest has been taken in the new process for manufacturing bricks from sand and lime. A number of plants have been built in the United States and are operating with success. Everyone interested in the subject should send for a copy of the book of testimonials and tests of sand-lime bricks made in factories erected by the H. Huennekes Co. of 114 Liberty street, New York. This company's process enables manufacturers to produce artificial building stone that is thoroughly sound and weatherproof at a small cost. The book mentioned presents some of the strongest statements from contractors, chemists, engineers, brick manufacturers and others concerning the merit of bricks made by the Huennekes process.

Steel-Plate Construction.

The William B. Pollock Co., Youngstown, Ohio, builder of steel-plate construction for blast furnaces, steel works, etc., is mailing a new catalogue of exceptional interest and of great value to all users of hot metal and cinder cars and ladles. This company manufactures the widely-known P. T. Berg cinder and hot-metal cars, the details of the construction and operation of which are briefly described in a most convenient manner with accompanying illustrations, bringing out the special points which have made them of superior merit, particular stress being put upon the interchangeability of the parts. Other illustrations show ladles up to sixty tons capacity. In addition to blast furnaces and steel works, the William B. Pollock Co. does all kinds of steel-plate erection, chimneys, riveted pipe, standpipes, etc.

Modern Farm Wagons.

The demand for farm wagons and other similar vehicles has been largely met in the South by manufacturers of that section. Not only have these manufacturers met that demand, but also shipped largely to all parts of the country and built up extensive business relations with both dealers and consumers. A prominent leader in the Southern vehicle industry is the Florence Wagon Works of Florence, Ala., wholesale manufacturer of farm wagons. This company's 1904 catalogue of the "Florence" light-running farm and lumber wagon is being distributed. Its contents describe briefly and tell the special merits of the wagons mentioned. Modern machinery, best materials, best and latest designs, best running gears and other features make the Florence vehicles in increasing demand everywhere.

The Marsh Steam Pump.

Marsh Catalogue No. 12 presents to the trade and steam users generally the results of a painstaking endeavor to display the regular Marsh Steam Pumps in the most intelligent manner possible. The lists and details tables have been arranged with care and in convenient form for reference and comparison. The various lines cover sizes and combinations to meet ordinary requirements, from which a suitable selection can be made. But in all cases where time will permit it is best to communicate with the maker or its nearest agency, stating fully the conditions and service for which a pump is wanted. Marsh pumps have no outside valve gear. They have the maximum of strength, are simple and economical, efficient and durable. The American Steam Pump Co. of Battle Creek, Mich., is the manufacturer.

Cutting Machines for Everything.

In nearly every factory and in thousands of other industrial establishments and in many business houses there are required cutting machines. The construction of such machines has been made a specialty by an establishment which builds cutting machines for everything. These machines range from little lever cutters to heavy automatic clamps, all sizes, all styles, for printers and bookbinders, paper mills and paper dealers, lithographers, paper-box manufacturers, textile workers, etc. The Oswego Machine Works of Oswego, N. Y., is the maker referred to. This company is now issuing an engraved leaflet calling attention to its successful specialties, the Brown & Carver cutters, and inviting callers at its exhibit in the Liberal Arts Building, Louisiana Purchase Exposition, St. Louis, this year.

Twist Drills—Their Uses and Abuses.

There has been issued a little booklet entitled "Twist Drills—Their Uses and Abuses." Its aim is to present a brief and comprehensive collection of ideas based on a prominent manufacturer's own practice and observation on the use of twist drills, and to assist users in obtaining an increased cutting capacity,

combined with maximum durability and a general satisfactory performance. The treatment of this subject has been entered into very exhaustively. Notwithstanding this fact, technical words or phrases not commonly used have been reduced to a minimum, making it intelligent to all readers. The publication is presented by that well-known specialist, the Cleveland Twist Drill Co., manufacturer of twist drills, reamers, taps, cutters, special tools to order, etc. For a copy address the office at Cleveland, Ohio.

For Store, Shipping Office, Engine-Room.

There are a multitude of supplies needed for the store, the shipping office, the engine-room. In buying it often becomes a regular "hunt" to find the articles sought. For facilitating such purchases the supply department of Patterson, Gottfried & Hunter, Limited, 146 Centre street, New York, offers its services. The company issued a booklet telling about its departments for all interested in buying for the store, the shipping office or the engine-room. This booklet specifies ash sifters, baskets, brooms, sash chains, window-cleaning equipment, etc., for the store, blocks and falls, box hooks, chain hoists, hammers, stencils, etc., for the shipping office, and ash cans, belting, bolts, coal scoops, iron-pipe fittings, pulleys, wire rope, screws, gauges, coal barrows, etc., for the engine-room. Patterson, Gottfried & Hunter also carry a large stock of metals, machinery, hardware and tools.

Dallett Pneumatic Tools.

The Thos. H. Dallett Co., York street and Sedgley avenue, Philadelphia, Pa., was established in 1883, and has been engaged in the manufacture of pneumatic tools for the past six years. From its establishment the company has aimed to have its product represent the highest development that the most skilled labor and talent were capable of producing. A careful examination of the Dallett catalogue reveals many points of superiority in the construction of Dallett tools, not only relating to the operation thereof, but also as regards the matter of repairs, they being, when necessary, simple and inexpensive. In addition to the care taken in the manufacture of these tools, they are each and every one subjected to a most rigorous test before leaving the factory, the highest grade of material procurable is employed, and all the pneumatic tools are guaranteed against repairs for the period of one year from date of shipment.

The Gillette Roller Bearing.

Strength of construction, skilled workmanship and careful attention to every detail of manufacture are each a means to the end sought in the use of the roller bearing. Simplicity, durability, practicability, these are the distinguishing characteristics of a good roller bearing, and these most important features are claimed to be embodied in the Gillette Roller Bearing. This is manufactured by the Gillette Roller Bearing Co. of Grand Rapids, Mich., now issuing a pamphlet giving full details regarding the device and the various vehicles manufactured by the company on which it is used. These vehicles include lumber carts, haul-off rigs, push-carts for lumber, express or baggage trucks, lumber-yard wagons, dry-kiln trucks, etc. The Gillette bearing's value as an anti-friction device has been established, as the increasing demand for it and its use on equipments to which it is adapted attest. Write the company for the pamphlet of particulars.

Stoneworking Machinery.

In the designing and construction of machinery for working stone American manufacturers have given their best efforts. The result is that the equipments offered embody high efficiency, together with the greatest convenience of operation and maximum durability. A specialist in this kind of machinery is the Lincoln Iron Works of Rutland, Vt., now issuing its latest catalogue. In this publication will be found a description of machines for planing, moiding, rubbing, finishing, sawing and the other operations necessary for producing the best possible finished stone for all kinds of uses. Reference is also made to tile manufacturing equipments and other kindred equipment now in demand. Illustrations are presented of the different machines, and the printed data is clear and concise. Present or prospective buyers of this class of mechanical equipment are advised to examine the Lincoln catalogue before placing their contracts.

"Brownholst" Cranes.

"Strictly high-class cranes, combining every modern improvement, approved safety devices and best design" is the watchword of the builder of the "Brownholst" cranes.

That these cranes have reached the high standard set for them is attested by the fact that orders for them are received from all parts of the world. Large industrial companies, contractors, railroads and other users of cranes throughout this country are among the most enthusiastic in their praise. The Brown Hoisting Machinery Co. of Cleveland, Ohio, builds the "Brownhoist," and is now issuing its latest clothbound book giving full particulars regarding them. With the "Weston Patent" safety lowering device, which the company owns exclusively, it is stated it is impossible to drop a suspended load, whether through "use, misuse, carelessness or neglect," or, in the case of hand-operated cranes, to injure a workman by flying handles in lowering a load. These features are at once appreciated.

Meyers Ornamental Metal.

Ornamental metal-work is now used most extensively in the construction and modernizing of buildings. It is manufactured for window guards, bank and office railings, elevator enclosures and for numerous other purposes which come under one's observation daily. A most comprehensive catalogue regarding this character of work has been issued by that well-known and long-established enterprise, the Fred J. Meyers Manufacturing Co. It shows all the latest designs in office railings, wire and iron window guards, iron and wire fencing, stairwork, builders' ironwork, ornamental brass, iron and wire work, stable fittings, stall guards, etc. The company named was established in 1865 and has built up an extensive trade in goods of superior workmanship, made to sell at prices as low as can be made consistent with first-class articles. The catalogue presents several hundred illustrations of different sizes and styles of fancy wire and other metal products made at the plant in Hamilton, Ohio.

Wood-Finishing Supplies.

Manufacturers and others who have wood-finishing to do should not fail to read the publication entitled "Lindeman, the Filler Maker." This book of 112 pages acquaints its readers with the latest additions to the repertoire of the finishing-room, and gives in terse language the best and shortest methods to reach the correct result in all finishes. The information is gleaned from the practical and experimental work of men who have made the study of finishing and the manufacture of finishing supplies a specialty. Foremen of finishing-rooms will save much valuable time by reading the bi-monthly issues of "Lindeman, the Filler Maker." This book is issued by the Barrett-Lindeman Company, 1400 Frankford avenue, Philadelphia, Pa., manufacturer of wood fillers, finishing supplies and kindred articles in general use. The company maintains a permanent experimental-room, wherein its various fillers are tested and where new methods for finishing woods are perfected for the benefit of its customers.

Knowles Pumping Machinery.

The 1904 catalogue of the Knowles Steam Pump Works gives particulars and illustrations of as many designs as possible of the Knowles improved pumping machinery. This company is constantly introducing new specialties and adapting the Knowles patent direct-acting pumping system to new mechanical purposes which the growing industries of the country demand. It therefore solicits correspondence regarding any of the machinery catalogued or for equipments adapted to special requirements. The catalogue includes and refers to different types of direct-acting steam pumps for boiler feeding, mine drainage, water-works service, etc.; also electric and belt-driven pumps, artesian-well pumps, both flywheel and direct-acting, jet condensers, relief valves, air and circulating pumps, wrecking pumps, vacuum pumps, sugar-house pumping machinery, etc.; in fact, pumping machinery of every type and for every purpose in engineering work. The company's offices are at 114-118 Liberty street, New York.

Ferro-Inclave.

A new material is being manufactured under the name of "Ferro-Inclave." It is of simple form, for the roofing, siding, flooring, etc., of modern buildings. As an article of manufacture, as well as the method of making, it is patented, and is the invention of Alexander E. Brown, vice-president of the Brown Hoisting Machinery Co. "Ferro-Inclave" is generally made in sheets of No. 24 or No. 22 box-annealed sheet steel. Each sheet is accurately crimped by special machinery into the dovetailed section. Each alternate dovetail opening at one end of each sheet is slightly wider than the same openings at the other end, and said openings at either end are alternately reversed, although

they are of the same depth. These forms provide for joining the sheets so that the complete covering is one homogeneous piece, water-tight even before the cement covering is put on. A pamphlet giving full details is being issued. For a copy address the Brown Hoisting Machinery Co. at Cleveland, Ohio.

Light Locomotives—Baldwin Make.

The name "Baldwin" is synonymous with the construction of modern locomotives. For many years the Baldwin Locomotive Works (Burnham, Williams & Co.), Philadelphia, Pa., has been building locomotives, and its product is used by railroads and industrial companies in all parts of the world. The Baldwin Company is at present issuing a clothbound book of some seventy-five pages devoted to its light locomotives, illustrations being presented of a number of the different types. These are intended for both broad and narrow gauge, adapted to every variety of industrial and special service. The dimensions given are intended as guides to selection by buyers, but modifications can be made of any designs to meet requirements. The locomotives listed consume wood, coke or bituminous coal, and with some additions can burn petroleum. All important parts are made to gauges and templates, therefore being entirely interchangeable. Purchasers in the locomotive field should not fail to examine this Baldwin catalogue.

Parquetry Floors.

Floors of polished hardwood have come into general use, and their advantages, both practical and artistic, are becoming better understood every day. For twenty years the Wood-Mosaic Flooring Co. has made the manufacture of hardwood flooring a specialty. The company has had many and varying experiences, and, profiting by them, has adopted only that which time has proven the merit of. From the felling of the oak tree to the polishing of the completed floors every process is done by the company. The company has large factories in Rochester, N. Y.; New Albany, Ind., and New York, with selling agents in most of the large cities of the country. These different branches employ a force of skilled workmen who do nothing but lay and finish floors. An interesting booklet illustrated with different designs of flooring is now being issued. It contains all the facts about hardwood parquetry flooring, and presents a list of some well-known users through the United States. J. M. Adams, 227 Charles street, is the representative in Baltimore.

Fisher's Hydraulic Stone System.

Much interest is shown nowadays in new systems for the manufacture of artificial building stones and similar product. Several of such systems have been introduced and are being followed with success in different parts of the United States. Attention is now being directed to the Fisher's Hydraulic Stone System, a description of which is presented in a pamphlet issued by the company. This system comprises an automatic and quick-acting machine for the manufacture of building stones, sidewalks, curbstones, copings, window-sills, doorsteps, brick, imitation of marble, roofing, granite for tiling and monumental work, etc. It is claimed that almost anything that is cast in metal can be produced by the machine, giving hydraulic pressure of 300 tons per minute, thus condensing the material—which is sand and cement—into a solid body, driving all air and voids therefrom, making one of the most compact, hard and durable construction materials of the century. A copy of the pamphlet can be obtained by addressing Fisher's Hydraulic Stone System, W. H. Fisher, patentee, main office at 334 2d street, Memphis, Tenn.

American Vulcanized Fiber.

Vulcanized fiber is now a recognized staple of commerce, possessing peculiar qualities which render it applicable to almost every branch of electrical or mechanical industry. It is produced by treating specially-prepared vegetable fiber with powerful chemical agents, whereby the exterior portion of each separate fiber becomes glutinous, and while in this condition the whole mass is consolidated and becomes practically homogeneous. It is insoluble in all ordinary solvents, and is not injured by contact with alcohol, ether, ammonia, turpentine, naphtha, benzine, petroleum, etc. The many other qualities cannot be named here, but are known to many builders of machinery and others engaged in industry. The American Vulcanized Fiber Co. of Wilmington, Del., issues an interesting booklet concerning the product above referred to. It manufactures vulcanized fiber, kartavart fiber and laminari fiber. Every builder of machinery is invited to correspond

with the company. The fiber is used for insulation, for journal bearings and bushings, thrust bearings or washers, brakeshoes, rollers of every description, elastic washers, gear wheels, wheels, etc.

Bartlett & Snow's Chain Belts.

A new chain catalogue, No. 9, is being issued to illustrate and describe the Bartlett & Snow special interlocking shoulder-bearing chain belts adapted for heavy work and especially recommended for Portland-cement mills, rolling mills, mines, saw-mills, fertilizer works, slaughter-houses and any and all conveying and elevating machinery. This catalogue treats of interlocking chain belts only. These chains are made with great care. The strength of all kinds of malleable iron depends very largely upon the annealing of it. If properly constructed and annealed, it is as strong as wrought iron. The most careful and minute care is taken in annealing these chains. Every link is examined and tested as soon as annealed, and if it does not come up to the standard it is immediately thrown out; therefore every link and every attachment can be relied upon. General Catalogue No. 7, of nearly 300 pages, illustrates and describes the detachable chain belts, elevators, conveyors, steam and direct-heat dryers, gears and all kinds of machinery manufactured and sold by the C. O. Bartlett & Snow Company. Send to main offices at Cleveland, Ohio.

American Crossley Gas Engines.

Many engineers believe the gas engine will finally supplant the steam engine for most purposes. It is claimed that the use of the gas engine, even in the smaller sizes, results in economies much greater than can be attained by the best steam engines. This belief is emphasized in a new edition of the catalogue of the well-known Crossley gas engines, more than 52,000 of which have been built at the home works in Manchester. After a most thorough investigation the rights to Crossley engines in America was obtained, and the Power & Mining Machinery Co. is now manufacturing them from the original drawings in its extensive shops. The Crossley gas engines have been thoroughly tested in practice, as the large number sold attests, and are offered as embodying in every particular the highest degree of excellence. The catalogue mentioned presents interesting details regarding the Crossley engine that should be known to all who use or think of installing gas engines for any service. The Power & Mining Machinery Co. was formerly the Loomis-Pettibone Gas Machinery Co., and is successor to the Holthoff Machinery Co. Its offices are at 52 and 54 William street, New York.

A Valuable Publication.

One of the most valuable of publications for buyers and sellers (architects, engineers, contractors, manufacturers, jobbers, retailers, purchasing agents, etc., and indispensable for mailing purposes) is Hendricks' Commercial Register of the United States. This book is issued annually, and the 1903 edition, now ready, contains over 550,000 names, addresses and business classifications, together with a complete index of all the industries of this country. It gives full lists of the manufacturers of and dealers in everything employed in the manufacture of material, machinery and apparatus, from the raw material to the finished articles, and from the producer to the consumer. The classifications are most thorough, enabling the user to readily find who by and where is made any article, machine or other of the many thousands of products of American industry. This latest edition of the Register is much larger than that of the previous year. The 1902 edition required but forty-six pages of three columns each to index the manufactured articles, while the 1903 edition requires forty-two pages of four columns each for such indexing. Some new features have been added, including a list of founders and machinists, rolling mills, jobbers in steamfitters' supplies, and an endless amount of lists of the same character. The publisher is the Samuel E. Hendricks Co., 76 Elm street, New York, and the book sells for \$6.

Electric and Gas Deal.

Messrs. J. P. Hornaday & Co., 1108 Traction Building, Cincinnati, Ohio, inform the Manufacturers' Record that Mr. Hornaday has purchased for the Salisbury-Spencer (N. C.) Railway Co. the Salisbury Electric Light and Gas Works. Furthermore, that the proposition as it now stands means a consolidation of all the public utilities of Salisbury and Spencer.

FINANCIAL NEWS.

Review of the Baltimore Market.

Office Manufacturers' Record,
Baltimore, Md., January 27.

Seaboard and G.-B.-S. Brewing issues were the principal features of the Baltimore stock market during the past week, the former experiencing a rise of 1 to 2½ points, and the latter a decline of about 2 points. There was generally more trading, a considerable number of transactions being made in bank and trust-company stocks and in miscellaneous bonds.

In the dealings United Railways common sold from 8½ to 8¾, the incomes from 56 to 56¾, and the 4s from 90¼ to 92. Light & Power 4½s changed hands at 79½ to 81; Consolidated Gas stock from 58½ to 60, the 6s at 100½ and the 5s at 110½; Seaboard common from 9 to 10, the rights from ¾ to ¾, the preferred from 16½ to 18½, the 4s from 65½ to 68, the 10-year 5s at 96½, and the three-year 5s from 79½ to 81. G.-B.-S. Brewing stock sold from 4½ to 5½, the incomes from 25 down to 23, converting to 24, and the 1sts between 46½ and 48½.

Bank stocks were dealt in as follows: Bank of Baltimore, 109½; Marine, 36¾; Second National, 195¼; Union, 117; Third National, 125; Citizens', 27¾ and 27½; Mechanics', 28; Exchange, 196 and 196½; Howard, 11½; Western, 37½. Trust, fidelity and indemnity company stocks were sold as follows: International Trust, 87½; Fidelity & Deposit, 129½ and 130; Mercantile Trust, 135; Maryland Casualty, 46 and 46½; Baltimore Trust & Guaranty, 235; Security Storage & Trust, 104.

Other securities traded in were: Atlantic Coast Line common, 107 to 110; do. Consol. 4s, 93 to 94½; do. 4s (Conn.), certificates, 90; do. 4s, certificates, new, 82 to 83½; do. 4s (S. C.), 99½; Atlanta Street Railway 5s, 103¼ to 103¾; Baltimore City 3½s, 1928, 111; Georgia & Alabama Consol. 5s, 102¼ to 102¾; Georgia Southern & Florida 5s, 111¼ to 112; Knoxville Traction 5s, 101; Lexington Railway 5s, 97; South Bound 5s, 105½ to 106; Baltimore Traction convertible 5s, 101¼; Baltimore City 3½s, 1930, 110¾ to 111; Charleston Street Railway 5s, 102½; Anacostia & Potomac 5s, 93 to 94½; City & Suburban 5s (Washington), 93 to 94; do. (Baltimore), 112 to 112½; Georgia, Carolina & Northern 5s, 105½; Northern Central stock, 88 to 91; Alabama Consolidated Coal & Iron preferred, 55 to 60; Albany & Northern 5s, 92; Charlotte, Columbia & Augusta 1sts, 113¾; Carolina Central 4s, 90; Central Railway 5s, 114; Baltimore & Annapolis Short Line, 92¼; George's Creek Coal, 84; Georgia Southern & Florida 1st preferred, 98; Norfolk Street Railway 5s, 105¼ to 105½; Petersburg 6s, B, 121¼; Toledo Traction 5s, 100 and 100½; North Carolina 4s, 1910, 102; Virginia Midland 2ds, 113; do. 3ds, 114; do. 5ths, 111; Charlotte & Rapidan 6s, 101; Maryland & Pennsylvania incomes, 46; Atlanta & Charlotte 1st 7s, 107½; City of Danville 5s, 103½; Noel Construction Co., 100; Virginia Century, 95; Baltimore Fire Insurance, 22; Northern Central 6s, 1904, 101; Baltimore City Passenger 5s, 106½; Maryland Telephone 5s, 65.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
January 27, 1904.

Railroad Stocks.	Par.	Bid.	Asked
Georgia Southern & Florida	100	...	45
Georgia Sou. & Fla. 1st Pref.	100	...	38
Georgia Sou. & Fla. 2d Pref.	100	...	62
United Railways & Elec. Co.	50	8¼	8½
Seaboard Railway Common	100	9¼	9½
Seaboard Railway Preferred	100	17¾	18
Atlantic Coast Line	100	109	109½
Atlantic Coast Line of Conn.	100	222	235

Bank Stocks.

Citizens' National Bank	10	...	27
Commercial & Far. Nat. Bank	100	45	...

Farmers & Mer. Nat. Bank.....	40	70
First National Bank.....	100	152
German Bank.....	100	106
Merchants' National Bank.....	100	183
National Bank of Baltimore.....	100	194
National Exchange Bank.....	100	199
National Howard Bank.....	10	111
National Marine Bank.....	20	36
National Mechanics' Bank.....	10	26
National Union Bank of Md.....	100	118
Third National Bank.....	100	125
Western National Bank.....	20	38 1/2
Trust, Fidelity and Casualty Stocks.		
American Bonding & Trust.....	50	60
Baltimore Trust & Guaranty.....	100	239
Central Real Estate & Trust.....	50	30
Colonial Trust.....	50	19 1/2
Continental Trust.....	100	129 1/2
Fidelity & Deposit.....	50	140
International Trust.....	100	87 1/2
Maryland Casualty.....	25	45 1/2
Mercantile Trust & Deposit.....	50	129 1/2
Union Trust.....	50	32
U. S. Fidelity & Guaranty.....	100	109
Miscellaneous Stocks.		
G. B. & S. Brewing Co.....	100	54 1/2
United Elec. L. & P. Prof.....	50	40
Cotton Duck Voting Trust.....	100	2
Consolidated Coal.....	100	74
George's Creek Coal.....	100	84
Consolidated Gas.....	100	59
Railroad Bonds.		
Albany & Northern 5s.....	91 1/2	92 1/2
Atlanta & Charlotte 1st 7s, 1907.....	107 1/2	107 1/2
Atlantic Coast Line Con. 4s.....	94	94
Georgia, Car. & North. 1st 5s, 1929.....	106 1/2	106 1/2
Georgia South. & Fla. 1st 5s, 1945.....	119 1/2	119 1/2
Georgia Pacific 1st 5s, 1922.....	119	119
Petersburg, Class A 5s, 1926.....	116	116
Raleigh & Augusta 1st 6s, 1926.....	113	113 1/2
Richmond & Danville Gold 6s, 1915.....	112 1/2	113 1/2
Savannah, Fla. & West. 5s, 1934.....	105	105
Seaboard & Roanoke 6s, 1916.....	107	109
Seaboard & Roanoke 5s, 1926.....	107 1/2	107 1/2
Southern Railway Con. 5s, 1904.....	112 1/2	113
Virginia Midland 2d 6s, 1911.....	112 1/2	113
West. North. Carolina Con. 6s, 1914.....	109 1/2	110 1/2
West Virginia Central 1st 6s, 1911.....	109 1/2	110 1/2
Wilmington, Col. & Aug. 6s, 1910.....	117 1/2	117 1/2
Wilmington & Wel. Gold 5s, 1925.....	115	116 1/2
Charleston City Railway 5s, 1923.....	102 1/2	103 1/2
Charleston Con. Electric 5s, 1909.....	76	81
Knoxville Traction 1st 5s, 1928.....	100	100
Newport News & Old Pt. 5s, 1908.....	107 1/2	107 1/2
Norfolk Street Railway 5s, 1914.....	91 1/2	92
United Railways 1st 4s, 1949.....	56 1/2	56 1/2
United Railways Inc. 4s, 1949.....	67 1/2	68 1/2
Seaboard 4s.....	96 1/2	96 1/2
Seaboard 10-year 5s.....	102 1/2	102 1/2
Georgia & Alabama Con. 5s.....	105 1/2	105 1/2
South Bound 5s.....	105 1/2	105 1/2
Miscellaneous Bonds.		
Mt. V. & Woodby Cot. Duck Inc.....	15	15
G. B. & S. Brewing 1st 3-4s.....	48 1/2	48 1/2
G. B. & S. Brewing 2d Income.....	24 1/2	24 1/2
United Elec. Light & Power 4 1/2s.....	81	81
Consolidated Gas 6s, 1910.....	109 1/2	109 1/2
Consolidated Gas 5s, 1929.....	111	111 1/2

SOUTHERN COTTON MILL STOCKS

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending January 25.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	50	50
Alken Mfg. Co. (S. C.).....	85	90
Anderson Cotton Mills (S. C.).....	105	124
Arkwright Mills (S. C.).....	66	79
Augusta Factory (Ga.).....	100	102
Avondale Mills (Ala.).....	100	108 1/2
Belton Mills (S. C.).....	100	102
Bibb Mfg. Co. (Ga.).....	100	108 1/2
Buffalo Cotton Mills (S. C.).....	100	100
Buffalo Cotton Mills (S. C.) Pfd.....	122	122
Cabarrus Cotton Mills (N. C.).....	95	95
Chiquola Mfg. Co. (S. C.).....	95	95
Clifton Mfg. Co. (S. C.).....	125	125
Clinton Cotton Mills (S. C.).....	110	115
Courtenay Mfg. Co. (S. C.).....	95	95
Columbus Mfg. Co. (Ga.).....	78	85
Dallas Mfg. Co. (Ala.).....	90	90
Darlington Mfg. Co. (S. C.).....	108	108
Eagle & Phenix Mills (Ga.).....	108	108
Easley Cotton Mills (S. C.).....	101	101
Enoree Mfg. Co. (S. C.).....	85	85
Enterprise Mfg. Co. (Ga.).....	76	76
Exposition Cotton Mills (Ga.).....	150	150
Gaffney Mfg. Co. (S. C.).....	86	86
Graniteville Mfg. Co. (S. C.).....	135	145
Greenwood Cotton Mills (S. C.).....	99	102
Grendel Mills (S. C.).....	100	104
Henrietta Mills (N. C.).....	200	200
King, John P. Mfg. Co. (Ga.).....	53	90
Lancaster Cotton Mills (S. C.).....	100	100
Lancaster Cot. Mills (S. C.) Pfd.....	100	100
Langley Mfg. Co. (S. C.).....	95	100
Laurens Cotton Mills (S. C.).....	95	162 1/2
Lockhart Mills (S. C.).....	102	102
Louise Mills (N. C.).....	95	103 1/2
Louise Mills (N. C.) Pfd.....	100	100
Marlboro Cotton Mills (S. C.).....	90	102
Mills Mfg. Co. (S. C.).....	100	100
Mills Mfg. Co. (S. C.) Pfd.....	100	100
Monaghan Mills (S. C.).....	100	105
Newberry Cotton Mills (S. C.).....	120	120
Norris Cotton Mills (S. C.).....	110	110
Ocell Mfg. Co. (N. C.).....	100	100
Orangeburg Mfg. Co. (S. C.) Pfd.....	100	100
Orr Cotton Mills (S. C.).....	100	100
Paclet Mfg. Co. (S. C.).....	100	100
Pelzer Mfg. Co. (S. C.).....	160	160
Piedmont Mfg. Co. (S. C.).....	137 1/2	137 1/2
Poe, F. W. Mfg. Co. (S. C.).....	100	100
Roanoke Mills (S. C.).....	100	103
Saxon Mills (S. C.).....	90	95
Sibley Mfg. Co. (Ga.).....	60	65
Southern Cotton Mills (N. C.).....	90	90
Spartan Mills (S. C.).....	135	145
Trion Mfg. Co. (Ga.).....	125	150
Tucpau Mills (S. C.).....	140	140
Union Cotton Mills (S. C.).....	150	150
Union Cotton Mills (S. C.) Pfd.....	135	135
Victor Mfg. Co. (S. C.).....	100	100
Warren Mfg. Co. (S. C.).....	100	102
Warren Mfg. Co. (S. C.) Pfd.....	106	106
Washington Mills (Va.) Pfd.....	95	95
Whitney Mfg. Co. (S. C.).....	115	125
Wilmington Cot. Mills (N. C.) Pfd.....	100	100
Woodruff Cotton Mills (S. C.).....	95	97 1/2

Manual of Statistics.

The Manual of Statistics Supplement for January contains editorials on "The

Lessons of the Year," "The Remarkable Cotton-Price Movement," and "The Railroad Profession." Upon the latter subject it says: "Railroading is now a progressive science. It is not to be presumed for an instant that the heads of the profession in the United States, where, it may be observed, it has attained its highest development, are inclined to rest on what they have accomplished. On the contrary, constant efforts are being put forth to improve the service, and, moreover, each individual property presents problems of its own of varying kinds, which can only be met by constant study on the part of those in charge of them.

It is not surprising that in several instances the retirement of prominent railroad officials has been due to the exacting duties they have had to perform, and the natural desire, after years of service, to be relieved from such burdens." The magazine also contains the statements of a number of railroad and industrial companies, besides statistics as to stock and bond prices.

Statistical Tables.

Spencer Trask & Co. have issued their 1904 edition of "Statistical Tables," pocket size. The publication, well known in financial circles, is this year more complete than ever, and in view of its dimensions, the amount of information relative to railroad and industrial companies contained therein is remarkable. Copies may be obtained upon request at the office of Spencer Trask & Co., William street corner of Pine street, New York city.

New Corporations.

It is reported that a bank is being organized, with \$25,000 capital, at Monroeville, Ala.

Reported that a new national bank will be organized at Hico, Texas, with \$50,000 capital.

The Citizens' Deposit Bank has begun business at Sharpsburg, Ky., with A. B. Slaughter as cashier.

Linden, Ala., is to have a national bank with \$25,000 capital, all the stock having been subscribed.

It is reported that a bank is being organized at Lamar, S. C., \$10,000 capital being already subscribed.

Reported that a new national bank will be organized at Montgomery, Ala., by William Berner and others.

The Bank of Chadbourn has been chartered at Chadbourn, N. C., with \$25,000 capital, by Joseph A. Brown and others.

The Gordon Bank of Harrison, Ark., capital \$25,000, has been incorporated by W. F. Gordon, J. R. Holt and C. S. Denton.

The Dominion Fire Insurance Corporation has been chartered at Tazewell, Va.; R. P. Bruce, president; capital \$50,000 to \$100,000.

It is reported from Savannah, Ga., that F. Wade Vaughan, Col. J. H. Estill and others are organizing a mutual insurance company.

The Farmers' State Bank of Winston, Mo., capital \$10,000, has been chartered by Charles S. Davis, E. D. Cutler, G. M. Caster and others.

The People's Bank of Courtland, Va., has begun business with the following officers: William Shands, president, and James E. Seibrell, cashier.

The Bank of Flora has been chartered at Flora, Miss.; capital \$25,000. The incorporators are W. B. Jones, R. W. Millaps, C. H. Alexander and others.

The Citizens' Bank, capital \$25,000, has been organized at Iuka, Miss., with W. T. Ross, president; G. P. Hammerly, vice-president, and E. T. Hammerly, cashier.

The Citizens' Bank & Trust Co. of Ok-

mah, I. T., has been chartered, with \$100,000 authorized capital, and the following stockholders: W. H. Dill, M. E. Dill and R. A. Dill.

The New Berne Savings Bank of New Berne, N. C., has applied for a charter; capital \$15,000. The incorporators are James A. Bryan, J. H. Hickman and George H. Roberts.

The Citizens' National Bank is the name selected for the new bank to be established at Orange, Va. It is reported the officers will be R. O. Halsey, president; R. C. Slaughter, cashier.

The First National Bank of Coolidge, Texas, has been approved; capital \$25,000. The organizers are J. E. Jensen, Callina, Texas; W. J. Wallace, J. R. Wallace, R. T. Bell and J. W. Butler.

The Louisa County National Bank at Mineral, Va., capital \$25,000, has been organized by electing officers as follows: Dr. W. J. Coleman, president; Dr. C. J. Terrell, vice-president; J. B. Woody, cashier.

The Farmers and Merchants' Bank of Hollis, O. T., has been incorporated, with \$10,000 capital, by W. B. Groves, R. A. Williams, J. N. Lindsay, G. T. Hollis, W. S. Cross, J. E. Jones and Carl S. Wilson.

The Bank of Green Cove Springs has been incorporated at Green Cove Springs, Fla.; capital \$15,000. The officers are P. L. Sutherland, president; O. A. Buddington, vice-president, and Ira Thomas, cashier.

The Brenham National Bank of Brenham, Texas, capital \$100,000, has been approved. The organizers are C. L. Wilkins, T. A. Low, E. Reichardt, F. W. Wood, H. F. Holt, James Tristram and W. A. Wood.

The Judsonia State Bank of Judsonia, Ark., has been chartered, with \$20,000 capital. The officers are J. R. Ergenbright, president; J. M. Ergenbright, vice-president, and C. M. Ergenbright, secretary and treasurer.

The First National Bank of Mt. Airy, Md., has been approved; capital \$25,000. The organizers are Charles A. Runkles, Mount Airy, Md.; Edward M. Molesworth, W. H. Hood, W. D. Jones and Albert W. Hall.

The Union Bank & Trust Co. of Pulaski, Tenn., has been chartered; capital \$60,000. The incorporators are J. D. Pullen, N. A. Crockett, J. M. Harwood, Ben Childers, Robert H. Porter, W. J. Yancey and T. P. Stone.

The Life Underwriters' Association has been organized at Raleigh, N. C., with officers as follows: R. B. Raney, Raleigh, president; Harris R. Wilcox, Charlotte, vice-president; P. D. Gold, Jr., Goldsboro, secretary-treasurer.

The First National Bank of Portsmouth, Va., capital \$100,000, has been approved. The organizers are Robert N. Harper, 610 14th street N. W., Washington, D. C.; John L. Watson, T. J. Wool, D. W. Todd and W. S. Langhorne.

The Fidelity Building and Loan Association of Georgetown, S. C., has been organized by electing the following directors: W. D. Morgan, W. W. Taylor, H. Schenck, George Doyle, Julius Isear, John Collins, James H. Fraser, E. W. Kaminski.

The Union City Bank of Union City, Tenn., has been organized by electing directors as follows: Seid Waddell, R. P. Whitesell, F. M. McRee, R. M. Whipple, T. E. Marshall, H. M. Miles, J. B. Hibbitts, Joe Harpole, J. F. Stubbs, J. P. Adams, Alex. Forrester.

The Interstate Mutual Fire Insurance Co., organized at Augusta, Ga., has elected officers as follows: President, James P. Verdery; secretary, Peleg A. Rhodes; assistant secretary, William C. M. Buckley. A treasurer will be elected at the next meeting of the directors.

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The Citizens' National Bank has been organized at Paintsville, Ky.; capital \$25,000. The officers are H. S. Howes, president; Jess Stafford, vice-president; J. F. Bailey, cashier; directors, F. M. Bayes, T. S. Kirk, W. H. Vaughan, Sampson J. Johnson, Frank Ramey, Willie Sloan, Geo. M. Johnson, H. S. Howes, Jess Stafford.	

[For Additional Financial News, See Pages 30 and 31.]

rn, See